

# INDEX OF FIGURES AND TABLES

1	Types of design-related study	20	54	Means resulting from aim or vice versa?	93	100	Amsterdam versus the ideal plans of Speckle and Stevin	127
2	Domains according to Van der Voordt	21	55	Situations of spreading	93	101	The girdle of canals as a variant on Stevin	127
3	Domains according to De Jong	21	56	Legend (material or space)	93	102	Dapper neighbourhood	127
4	Information content of a drawing	36	57	Domains of terminology	94	103	'Plan Zuid'	
5	Succession of sprawl	36	58	Functionalism (Håring (1922) Cow Stable Holstein)	94	104	Medieval Amsterdam	128
6	Big cities around the Green Heart	36	59	Formalism (Gehry (1998) Museum Bilbao)	94	105	Paris: system of three passages	129
7	North and South wing	36	60	Structuralism (Blom (1962) Prix de Rome)	94	106	Osdorp	130
8	Deltametropolis	36	61	Scheme 1: The in-between realm of Design	97	107	Osdorp	130
9	Scale paradox	37	62	Scheme 2: A comparison of aims in research, education and practice	101	108	Osdorp	
10	Scale articulation	37	63	Primitive forms and their combinations	104	109	The process of damming up, according to Palmboom	131
11	Scope of nominal measures	37	64	Hephaiston-tempel 440 BC Athene agora	104	110	Articulation of polder land	
12	Object and context	38	65	Spacial expressions of social differentiation	105	111	Rotterdam as an agglomeration of islands	131
13	Different dynamics and perspectives	38	66	Spacial forms of political, cultural and economical differentiation	105	112	Maastricht according to Geurtsen: the elements decisive for the spatial image of the city	132
14	The context during the building process	38	67	Implicit function characteristics	105	113	The Hague: the morphology of the 'long lines' parallel to the ridges of the dunes	132
15	Overlapping concepts	39	68	Contest submissions for cheap labour housing	107	114	The Hague: the morphology of the 'long lines' perpendicular to the ridges of the dunes	132
16	Exclusive and inclusive concepts	39	69	House in Aurora, designed by Goff	107	115	System of cross-connections in the infrastructure	132
17	Environment according to Udo de Haes	39	70	Schematic representation of the phases and influences in the design process	108	116	Decomposition-analysis for The Hague South West	133
18	Environment in technical sense	39	71	Rietveld, Schröderhuis, open corner	108	117	Plan configurations The Hague South West	133
19	Three transformations on one reference	40	72	Nouvel in co-operation with Starck, design for an opera house in Tokyo	109	118	Three types of relation between river and city	134
20	Transformation difficult to name	40	73	Le Corbusier, sketch of the concept of his 'Unité'.	109	119	Different variants of the type "the river as a water landscape in the city"	134
21	Not every condition is a cause, but every cause is a condition for something to happen	41	74	MVRDV, scheme of the concept for admission lodges on the 'Hoge Veluwe'.	110	120	Operation on the dike trajectory Brielselaan	134
22	Any probable event is per definition possible, but there are improbable possibilities	41	75	Mario Merz, two installations of an igloo	110	121	Typological analysis of building blocks	135
23	'A not imaginable without B'	41	76	MVRDV, three admission lodges	110	122	Scheme 3: Typological overview of design driven composition research approaches	139
24	Terms A pre-supposed in a definition of B	42	77	MVRDV, detailing of the admission lodges thrice	111	123	Scheme 4: Legend, symbols used in schemes of design driven research types	140
25	Stairs of imagination	42	78	Richard Serra, composition of corten steel	111	124	Type I: Individual design based research	140
26	Conventions of reference according to Endnote	44	79	Per Kirkeby, object in brick	111	125	Type II: Design project based research	141
27	Shopping mall in Zoetermeer	49	80	MVRDV, detail admission lodge in 'corten' steel	111	126	Type III: Design workshop based research	142
28	Possible framework for a systematic description of a plan process	54	81	Aalto, Floorplan theatre in Essen	112	127	Type IV: Designerly workshop based research	142
29	Oil port Pernis, Rotterdam.	72	82	Rossi, Floorplan theatre in Genua	112	128	Type V: Individual design based research	143
30	Example of a simple determination table	72	83	OMA, floor plan Danstheater, The Hague	112	129	Type VI: Comparative design based research	144
31	Topographical map of the city of Rhenen on different scales, based on the same aerial photograph	73	84	Semper, floor plan Festspielhaus Bayreuth and typological scheme applying to all of the four theatres.	113	130	Type VII: Design document based research	145
32	Thematical map: the roadmap of The Netherlands	74	85	Floor plan of the Scala in Milan, an example of a nineteenth century theatre	113	131	Type VIII: Designerly interpretation based research	145
33	Thematic map: soil composition based in data obtained 'in situ'.	74	86	OMA, axonometry of the IJ square.	114	132	Objectives of evaluation	151
34	Thematic map: dispersion of the population	74	87	Luckhardt brothers, model 'Stadt ohne Höfe'	114	133	Themes for evaluating buildings	152
35	Comparison of Rhenen between 1850-1865 and Rhenen around 1987	75	88	OMA, sketch for the IJ square, with adjustment to 'Stadt ohne Höfe'.	114	134	Matrix for evaluating the matching between ends and means	153
36	Parcelling of The Netherlands according to Hofstee and Vlam (1952)	75	89	Scheme of the transformations.	114	135	Characteristics of the building	153
37	Legenda by image	75	90	Liesbeth van der Pol, Twiske-West, urban plan and drum residences	115	136	Results from an evaluation of Health Centre Merenwijk, Leiden.	154
38	Sieve analysis according to McHarg (1969)	76	91	Liesbeth van der Pol, blueprints of the drum residences	115	137	Comparative floor-plan analysis and ex post evaluation in design research	155
39	Parcelling analysis of Palmboom (1990)	77	92	Duiker en Bijvoet, servants' home of the 'Zonnestraal' sanatorium.	116	138	Typology of health-centres	155
40	Image of the South-Holland Landscape	77	93	OMA, block on the IJ square. Opened out axonometry en floor plan.	116	139	Different design solutions for the separation between consulting and examination	156
41	Morphological study of the landscape	78	94	Different designs for 'De Beurs'	119	140	Instruments for measuring the quality of buildings	157
42	Lefavre en Tzonis, 2000, see similarities in design means	89	95	Floor plan and façades of Hotel American, proportional system drawn by author	121	141	The relationship between time and effect	159
43	Types of design-related study	89	96	Floor plan and façade of the 'Nederlandse Handel Maatschappij'	122	142	Framework to map consequences	159
44	K.van Velsen, 1988 design study for the library of Zeewolde	90	97	Proportional system of the ground plan of 'De Beurs'.	123	143	Three descriptions of the planning cycle	160
45	Design study of the design process of the library in Zeewolde	90	98	Façade and proportional system of 'De Beurs'.	124	144	Colossal Pictures	161
46	Typological research of libraries	90	99	Parma according to Rowe	126	145	Co-ordinate system to map the predictability and impact of developments surrounding the design.	162
47	Study by design graduation Van der Voort	90		Saint Die (Le Corbusier) according to Rowe	126	146	The Dutch residential assessment system WWS 164	164
48	Rietveld Schröder House	91				147	Survey main scores	166
49	Which ground of comparison?	91						
50	Actions between legend, form, structure, function and intention	92						
51	Raumplan	92						
52	Validity and reliability	92						
53	Difference not to be explained by the purpose	93						

148	Routing of project-development	167	202	Mendelsohn Einsteinurm (Potsdam, 1920)	211	262	Light simulation: false colour intensity analysis in the space of figure 21	246
149	The radial type nursing unit design	169	203	Acceptible and not acceptable sizes	212	263	Storyboard extract	247
150	Evaluation and ranking criteria	169	204	Arithmical series in building	212	264	System analysis: procedure	251
151	Three different types of correctional facilities	170	205	Arithmical sequence with sum	213	265	Futures and their modalities	253
152	Four models for correctional facilities	171	206	Fibonacci's sequence	213	266	From possibility to norm	254
153	Variables for a cost/ quality comparison	171	207	Geometrical sequence	213	267	Reduction to the average	255
154	Steps in effect analysis comparing plans	174	208	Golden Section	214	268	Actual growth of the population in the Netherlands	256
155	We may think of reality as a complex of sub-systems.	181	209	Fibonacci house & Golden Section house	214	269	f(Gen)=exp(Gen)	256
156	Example of a verbal model, respectively visualised verbal model	181	210	Measure systems of Le Corbusier	214	270	The same with parameter	256
157	Graphic representation of an example of a mathematical model with mathematical contents	182	211	Golden Section	214	271	The exponential growth of a population	256
158	Example of a spatial model on scale	182	212	Plastic Number	214	272	Slice of figure 271	256
159	Example of a spatial model: a principle model of a city resembling a ribbon	182	213	The plastic number	214	273	The logistical curve	257
160	Depiction of a mechanical model of a rail system	182	214	Morphic Numbers	215	274	xGen-1 = axGen - axGen2	257
161	Spatial model of a rail system	182	215	Simple shapes	215	275	a = 3	257
162	Sunlighting-experiment aided by a model	183	216	Apparent difference in surface between centre and periphery	215	276	a = 4	257
163	Depiction of a concrete blotting-paper (analogue) model of an urban system.	183	217	Nodes and connections in regular solids	216	277	Lotka-Volterra function	257
164	Types of models according to their function	184	218	Regular solids as a graph	217	278	Population development in Europe	258
165	Spatial, descriptive, conceptual model	184	219	Octahedron, K5, K3,3	217	279	Possible, probable, desirable, image of future and scenario	258
166	Types of models according to their modality	184	220	Four connected rooms	217	280	Cross-wise integration of sector scenarios	259
167	Descriptive model, conceptual	184	221	Dual graph	217	281	Difference in dynamics between trends	259
168	Spatial explorative conceptual model and conceptual, graphically rendered, mathematical model	185	222	Possible relations between rooms	218	282	Balancing between sectors	260
169	Graphically rendered mathematical, predictive model, conceptual	185	223	Planar selection of possible relations	218	283	Technical balancing of projects	260
170	Example of a planning model	185	224	Different solutions of the same dual graph	218	284	Foresight triangle	260
171	Five scenarios (explorative-projective models)	185	225	Wild and ordered housing	219	285	Context	263
172	The planning concept 'Groene Hart'	186	226	An average of means	219	286	Hierarchy and dispersal of shopping centres	268
173	Visualised plan-objective	186	227	Possibilities to compose averages from the 10 numbers from 0 to 9 an average	219	287	Large-Scale Retail Establishment Alexandrium II in Rotterdam North East	269
175	Combination of a spatial and mathematical (descriptive) model	186	228	More results stabilise the mean	219	288	Office locations and characteristics	270
176	Principle model for the central part of a central town in a region	187	229	Classes of observations	220	289	Place of programming in a traditional building process	271
177	Translating a model to (future) reality: 'The way back'	187	230	Chance within class boundaries	220	290	Brief developed from global to detailed	272
178	The (has-been) surface articulation of the Bijlmermeer	188	231	LP problem	221	291	Supports of space for a child health assessment centre new style	277
179	Circular residential building by Bofill in Marne-la-Vallée	188	232	LP operationalisation	221	292	Example of a flow-chart for a child health centre	277
180	De Minister of Physical Planning of the Netherlands compared the 'Green Heart' of the 'Randstad Holland' to Central Park, Manhattan, New York City	188	233	Solution Space	221	293	Sekisui Heim, housing factory in Japan	281
181	Modal language games	189	234	Fractals	222	294	Hinged nodal bond	286
182	Operations with full-sentence functions	192	235	Properties of derived functions	227	295	Design of material with a high acoustic impedance	286
183	Quantor functions	193	236	A wall as a function	227	296	The transparent column after the trial	286
184	If truth table	195	237	A house as a function	228	297	Study of context	287
185	Iff truth table	195	238	A house with waved walltops as a function	228	298	Summary programme of requirements	287
186	Complete truth table	196	239	Powers of e	228	299	Relation schema + valuation	288
187	If truth table	196	240	Simulated population of The Netherlands	229	300	Typing	288
188	Iff truth table	196	241	Drawing by an eight-year-old (1996, KidPix on a Macintosh Powerbook 165c)	232	301	Scale relation study	288
189	Than ... if truth table	196	242	Alternative representations	232	302	Urban context	288
190	Three situations	198	243	A basic set of symbols for floor plans	233	303	Test of form	289
191	Modus ponens, tollens, abduction	198	244	Floor plan created with the symbols of figure 243.	233	304	Cross-section	289
192	Pythagoras	204	245	Elements and abstraction	235	305	Loose sketch	289
193	Summary of tests on paired chance variables X and Y	207	246	Elements and illusory contours	235	306	Sketch with a ruler	289
194	A programme, approx. 1/3 of the site, spread over the ground in 3 resolutions.	208	247	Textbook representation of local co-ordination constraints	236	307	Study of the front	289
195	V(3,3) = 33 = 27 variations	208	248	Template representation of local co-ordination constraints	236	308	Spatial sketch	289
196	P(n) = n! : 1, 2 en 6 permutations	208	249	Multi-level design representations and information retrieval	238	309	Different design ideas	289
197	P(4) = 4! = 24 permutations	208	250	The aesthetic measure of isolated polygonal forms according to Birkhoff	240	310	Context	289
198	Combinatorial explosions	208	251	Examples of horizontal-vertical networks according to Birkhoff	241	311	Come-back of an idea	290
199	Permutations in 4 niches, with at least k = {1,2,3} black elements combined with other hues.	209	252	Coding of square	242	312	Adding functions	290
200	Combinations in 4 niches of 2 colours	210	253	Coding of branching with bifurcation signs	242	313	Library study	290
201	Defining line segments by vectors	211	254	Coding of a floor plan	242	314	Final drawings	290
			255	An architectural scene	243	315	The outcome matrix of the original Prisoner's Dilemma	296
			256	A decomposition of figure 255 into geons	243	316	The payoff matrix of the original Prisoner's Dilemma	296
			257	The geons in figure 256	243	318	The solution space	302
			258	Coding of figure 256	244	319	The objective function	302
			259	Image produced with the standard (scanline) 3D Studio MAX renderer	245	320	Position of qualitatively optimum designs in relation to the mathematically optimum design	302
			260	Image rendered with the Illustrator 2 plug-in for 3D Studio MAX	245	321	How environmental issues affect the master plan during the gradual progression from analysis to design	314
			261	Photo-realistic light simulation	246			

322	Maximisations give insight into environmental issues affecting the master plan.	314	383	The autonomous natural process	370	447	Northern border	430
323	Map 1 The site map of the separate areas	314	384	The base cycle of designing	370	448	Western border	430
324	Map 2. Maximisation A1 (flora and fauna) and A2 (landscape and ground)	315	385	Design process	372	449	Southern border	430
325	Map 3. Water maximisation A3	315	386	Players in architecture and product design	373	450	Inner area	430
326	Map 4. Environmental optimisation landscape, water traffic, energy	316	387	Deformations	379	451	Combining	430
327	Map 5. The integration	317	388	'Timeless', Folded surface	379	452	Curved form	430
328	Map 6. One of the variations from the design study carried out by Lafour en Wijk for the consultation with designers in November 1996	317	389	Guggenheim, Inside and Outside	380	453	Bits and pieces	430
329	Ensemble	324	390	Basic AI fields	382	454	Development	430
330	Façade	325	391	Robert Delaunay Eiffel tower, 1913	390	455	Wedge	430
331	Bridges	325	392	Charles en Ray Eames, Eames House (Los Angeles, 1946)	390	456	Circle	431
332	Floor plan	325	393	Jean Nouvel; Jean-Marc Ibos, Nemausus Housing (Nîmes, France, 1987)	392	457	Beak	431
333	Façade	325	394	Doormats	392	458	Development	431
334	Floor plan	325	395	Marcel Duchamps, Fontaine, 1917	392	459	Check your watches	431
335	Six shape variants	326	396	Pablo Picasso, Tête de Taureau, 1942	393	460	Context	431
336	Selection	326	397	Le Corbusier, Dining Table (Parijs, 1933)	393	461	Model	431
337	Design process according to SBR/ISSO	332	398	Pierre Chareau; Bernard Bijvoet; Louis Dalbet, Maison de Verre (Parijs, 1932)	394	462	Adjustment	431
338	Design process HVAC installations	333	399	Tie plates and rivets, flanges with slate panels	394	463	The M-line	434
339	Integration building and climate control	333	400	Stylistic amalgam	394	464	AUP: General Expansion Plan Amsterdam	434
340	Predictions of variations in air and radiant temperature by TO program.	334	401	Jean Nouvel, (1983) Doll's house	395	465	'Blotches' plan	434
341	Calculation of temperature and air flows by CFD program.	334	402	Toolbox of childhood	395	466	Grachtengordel Amsterdam, de Amstel	434
342	The influence of the participants	339	403	Hertzberger Washbasin, De Drie Hoven and Centraal Beheer (Apeldoorn, 1970)	395	467	Aerial photograph of 'Plan-Zuid	435
343	Views of the future	339	404	Max Liebermann Restaurant 'De Oude Vink' (Leiden, 1905)	399	468	IJburg	435
344	Schematic representation of the design process	339	405	Mies van der Rohe Barcelona-pavillion	407	469	Surface design West 8 for the GWL area in Amsterdam	439
345	The Condensed model	340	406	Jean Nouvel Concert hall, Luzern	407	470	Urban Master Plan Kop van Zuid, 1996	439
346	Relationship matrix	341	407	Continuities in similarities	413	471	Urban Master Plan Sphinx – Céramique site of Jo Coenen, Maastricht, 1987	439
347	Selection matrix	341	408	External and internal priority	413	472	Basic allocation method	440
348	The classification of buildings	342	409	Magritte, La condition humaine, 1934	414	473	The SAR-fabric method	440
349	Low-rise building	342	410	Ghirlandaio, Louvre	414	474	The Decomposition Method	440
350	Outline design	342	411	'True' is what works	415	475	The three-traces method	440
351	Possible roof shapes	343	412	A series of actions	415	476	Form concept	440
352	Combinatorial possibilities	343	413	Body or light	416	477	The method Lynch	441
353	Structure according to Ackermann	346	414	Stage I Analysis of the location	419	478	Environment differentiation	441
354	Subject coding according to Gout	346	415	Stage II Making the findings spatial	420	479	Townscape	441
355	Levels of decision making	347	416	Stage III Specific questions	420	480	Pattern language	442
356	Van Randen characterised the power game in the building process as 'the spaghetti-effect'	347	417	Stage IV Study of material and construction	420	481	Cycle of forming plans	443
357	Koppenmaat	348	418	Stage V Stuck	420	482	Division and segmentation	445
358	Plattegrond ruimteplan volgens NEN2883	349	419	Stage VI Gaining depth	421	483	Tailoring and detailing	445
359	Plattegrond materiaalplan volgens NEN2883	349	420	Stage VII Beyond being pleased by one's self	421	484	Composition, components and details	445
360	Adjoining and penetrating connections	350	421	Concept	423	485	Vista from the Louvre to La Défense	446
361	Four illustrations from the handbook	350	422	Avenue	423	486	Language games	447
362	Maken op de bouwplaats	350	423	Curved Avenue	424	487	Teapot	449
363	If it clicks it is alright	350	424	Form	424	488	Changing the location of Naturalis from downtown Leiden into the edge of the old city	453
364	Separating	351	425	Option for extension	424	489	Chronological versus synchronous study by design	455
365	Group level	351	426	Structural lay-out	424	490	Four perspectives	457
366	Part	352	427	Study: office wings curved, circular conference room, central staircase.	424	491	First idea	460
367	Form	352	428	Same study; but staircase and CC room	424	492	Twin-city vision for Leiden	460
368	Material	352	429	Study office wing south	424	493	Blueprint of the new building	460
369	Fitting problem and no fitting problem	352	430	Several test models	424	494	Spatial drawing of the new building	461
370	Relation diagram 1	353	431	Edges sharpened	425	495	Workshop: all together around the model	461
371	Relation diagram 2	353	432	Cutting the banana	425	496	Urban plan	461
372	Relation diagram 3	353	433	Orientation banana – pencil in parallel	425	497	Tower in the middle of the building	461
373	Skeleton	354	434	Determining module size carrying construction offices	425	498	Through the scientific department to the collection in the tower.	461
374	Optional window	354	435	Connecting banana & pencil	425	499	Exhibition concept	461
375	Roof extension	354	436	Design of the façade	425	500	Aerial view and vertical cross-section	461
376	Matura system	354	437	Façade development	426	501	3D image and aerial view	462
377	Schematic Process	356	438	Detailing of the climate façade	426	502	Test of form	462
378	Three profiles overlapping	358	439	Adjustment	426	503	Blueprint	462
379	Part 3D model of the Floriade design by Kas Oosterhuis	359	440	Floor plan, final design	426	504	Blueprint from the sketched design	462
380	Architecture designing and product designing	367	441	Boring	426	505	Timelessness	462
381	The stages of the innovation process	369	442	Final result: the eastern wing after sunset	426	506	Urban plan	462
382	Iteration from vague to concrete	369	443	Map analysis	429	507	Blueprint final design	463
			444	Built and unbuilt	429	508	Design sketch of the column	463
			445	Essence	429	509	Final result	463
			446	Eastern border	429	510	Photographs of the final result	463
						511	The image of the skeleton of the whale proves to be a constant during the design process.	463

512	Visit location	466
513	Costing calculation	466
514	Programme of Requirements	466
515	Interviews	466
516	Experiencing	466
517	Northern light	466
518	Surfaces	467
519	Rectangles	467
520	Light	467
521	Café Warmerdam	467
522	Below street level	467
523	Adjustment	468
524	Line of the façade	468
525	Exposition space	468
526	Mayor & Aldermen	468
527	Photographs of the working model:	469
528	Creating	473
529	Labyrinth, after ancient Cretan coin	476
530	Matrix	476
531	Surveying	477
532	Paul Klee, 'Dream City'	477
533	The Pleasure of Inventing and Making	478
534	Setting in Classical Philosophy	478
535	Daedalus en Icarus	479
536	The areal photograph	479
537	A tower that is not a tower	480
538	Box of miracles	480
539	Corner-points	480
540	Fourquarter-circles	480
541	Entrance of the labyrinth	480
542	Collection of theatres	480
543	The Bridge exhibition	483
544	A comparison of characteristic design aspects	484
545	New scheme to differentiate between shapes	487
546	Four basic types of twisting	488
547	Example of a combination of two ruled surfaces	
	type R1	488
548	Five basic curve surfaces	488
549	Curve surface K1	488
550	Curve surface K2	488
551	Curve surface K3	488
552	Curve surface K4	488
553	Curve surface K5	488
554	Tordo 1	488
555	Twister 2	489
556	Twister 3	489
557	Twister 4	489
558	Low-rise tordo 2a	490
559	The reyno twist window frame-system	490
560	Typology of futures	492
561	The rôle of design in different phases of a development process	492
562	Exploration by design	493
563	Design as a social process	493
564	The Netherlands as a choice of policy options	494
565	Landuse in % of total area of the Netherlands	494
566	Perspectives	496
567	Projects	497
568	Decision process on planning policy	497
569	Lay-out of dealing room	498
570	Dispersal	498
571	Density of Paris. London and Deltametropolis	499



# INDEX

In this index an expression like  $y(x)$ , object (subject) means 'object  $y$  as a working (function, action, output, result, characteristic) of the subject  $x$  (independent variable actor, input, condition, cause)'. The sign  $\rightarrow$  means 'see also'.

∩ structure	326
∩	196
∪	196
∩	196
∩	196
∩	196
∩	193, 197
∩	197
⇒	195, 196
> - <	197
∇x	192
∃x	192
:	193
↔	193
:=	193
=	193
3D computer models	421
3D designer computer programs	364
3D model	359
3D modelling	378
3D modelling software	379
3D Studio MAX	245
3M	348
3M line grid	350
95% probability area	220

## A

A4 notebook	466
A4 page	291
Aalto, A.	112
Aarts, J.M.	215, 295
Aarts, K.	295, 296
Abarbanel, R.	382
abduction	197, 199
above	475
abstract	474
abstract representations	237
abstract (construction not recognised)	407
abstracting stage	128
abstraction	73, 98, 406
abstraction level	39
abstraction (change)	190, 206
abstraction (changes)	37
abstraction (level)	105
ABT	356, 489
academic	416
academic enquiry (border zones)	143
academic sections (building constructions, industrial building, applied mechanics)	346
academy of arts	465
acceptability test	246
access	316
access and surface	114
access galleries	392
access (ring structure)	326
access (typology)	114
access-equipment	337
accessibility	270
accessibility	274, 289, 310, 337, 468
accessibility (knowledge)	43
accessible by cars	465
accessible (maintenance, replacement)	330
acclimatisation	334
accommodate (new purpose)	395
accumulate in a concrete design	476
accumulating	73
accuracy	73
accuracy (behind the comma)	212
accuracy (margin)	212
achievements (building)	149
Achterberg, J.	21, 456, 498
Ackerman, J.S.	237

Ackermann, K.	345
Ackoff, R.L.	298
acoustics	274, 331
acquaintance	269
acquisition (commission)	427, 432
acropolis	126
act of designing	474
acting communically	305
acting (thinking)	478
action	414
action model	184
action plan	374
action space	165
action (idealistic)	293
action (undertaking)	372
actions (instinctive)	415
actions (order)	409
actions (self-evident)	416
actions (sequence)	415
actions (series)	415
activities	271, 274, 275
activities to be housed	274
activities (language)	383
activities (project)	218
activity patterns (timebound-combinations)	492
activity sheets	274
activity (design)	99
activity (ex ante)	286
activity (human)	370
activity (research)	99
actor (intuition, tradition, trust, impulse)	294
actor's space (orientated)	481
actor's viewpoint	296
actors vary	455
actors (rational)	293
actual effect	159
actual use	158
AD	395
adapt to the climate	334
adapt (capacity)	395
adaptability	325, 367
adaptability (plan (stage (scant information)))	163
adaptable building	310
adaptable (installations)	330
adaptable (product)	368
adaptation picture	462
adaptation (intervention)	324
adaptation (possibly)	372
adaptations	368
adaptations (building)	158
adapted (pre-fabricated products)	352
adaptive behaviour of people	334
add (form)	104
added or taken away	95
addenda (history)	62
adding	206
adding functions	290
addition	128
additional floor	325
additional functions	288
additional requirement	427
adford, A.D.	299
adherence	395
adhering and closure	350
adjectives	12, 40
adjust (situation)	395
adjusting (structure (context))	468
adjustment to the existing situation	431
admissibility (ethical)	25
Adriaansens, C.A.	79
advanced modelling	378
advanced modelling software	380
Adviesraad Technologiebeleid TU Delft	358
advisers	271, 338
AEC	381
aecXML	381
aerial bridges	325
aerial photograph	33, 71, 473
aesthetic appreciation	240
aesthetic composer	361
aesthetic criteria	307
aesthetic dialectic (wholes, parts)	95
aesthetic evaluation	245
aesthetic image (independent)	410
aesthetic measure	240
aesthetic norm (history)	64, 66

aesthetic order	240
aesthetic preference	239
aesthetic prejudices	241
aesthetic quality	158
aesthetic response	240
aesthetic (individual)	394
aesthetically attractive	68
aesthetics (changing, city (form (conditions (geo-morphological), sites (allotting), structure (buildings))))	131
aesthetics (descriptive approach)	240
aesthetics (experiencing)	367
aesthetics (machine)	109
aesthetics (perception)	241
affection	390
affective action	293
agenda (design)	493
agenda (political)	496
agenda (priority, incompleteness)	190
agenda (reduction into discussable topics)	446
agent	305
agent technology	380, 382
agent (software)	382
agents in the design process (post modern changes)	305
agents (building process)	189
agents (free)	491
agglomerations (level)	84
aggregate representation	236
agreements (reduction (location, time))	447
agriculture	494, 495
agriculture and nature	495
agriculture (decline)	496
AI	382
AIDA	371
aim	253, 409
aim (abstract pre-design)	253
aim (function)	92
aim (intention)	92
aim (means)	93
aimless experimentation	416
aim-orientated research	92, 93
aims of design activity	95
aims (selfish)	296
air pollution	164
air (indoor)	330
airconditioning	329
air-conditioning system	281
air-filtering system	332
airflow	334
airpurity	331
aisles (side)	123
Alberti, L.B.	95, 118
Alexander, C.	89, 203, 438, 439
Alexandrium	269
Algemeen UitbreidingsPlan	129
algorithm (formal model)	183
algorithms (evolutionary)	382
algorithms (genetic)	377, 382
alienating effect	110
alienation (person, author)	65
alignment	234
alignment and size	424
alignment (horizontal)	243
alignment (vertical)	243
all encompassing evaluation	154
allegorical	68
allegory	68
all-metal blocks	391
allocating the programme	439
alloy	285
all-quantor	193
Allsop, Br.	69
Almere	169, 439
Almere (primary schools)	171
alpha sciences	379
alpha way (art)	491
Alphen aan de Rijn	364
alternate design options	143
alternative configurations	244
alternative designs	171
alternative plans	60
alternative solutions	251, 271, 274, 295
alternative (final (choice))	20
alternatives	20, 254, 449
alternatives (assessment)	168
alternatives (display)	341
alternatives (evaluation (ordered	

criteria (weights))	343
alternatives (programme of requirements)	271
alternatives (solution)	251
aluminium	347
ambience (domestic)	391
ambiguity (perception)	241
ambiguous language	190
amenities (combining (shops))	268
amenities (compulsory)	268
amenities (free)	268
amenities (level)	268
amenities (location (rent))	267
amenities (network)	268
Amersfoort	435, 439
amorphous polymers	285
amorphous solid	285
amphi-theatre	480
Amstel	434
Amsterdam	118, 126, 434, 435, 439, 495, 496
Amsterdam canals	435
Amsterdam School	121
Amsterdam Stock Exchange	121
Amsterdam (Leidseplein)	120
Amsterdam (medieval)	128
Amsterdamse Bos	188
analogue design media (implementation structure)	236
analogue model	181, 183
analogue representation	236
analogue techniques	232
analogy	371, 389, 402, 441, 467
analogy (design cases)	144
analogy (examples)	493
analyse	12
analyses and selections	339
analyses (in depth)	142
analyses (portfolio)	167
analysing	417
analysing a plan (method)	128
analysis	25, 58, 61, 275, 447
analysis and manipulation	243
analysis of buildings (structure, layout tools (measuring, draw, describe, archive))	117
analysis of design products	245
analysis of design variants	455
analysis of effects	443
analysis of effects (ex ante)	446
analysis of the location	419
analysis of the map	429
analysis of the organisation	274
analysis phase	340
analysis (architectural (normative models))	239
analysis (building)	117
analysis (comparative (floorplan))	155
analysis (comparative)	58, 155, 396, 455
analysis (composition)	160
analysis (decomposition)	133
analysis (design result)	143
analysis (design)	314
analysis (documents)	155
analysis (effect)	171, 259
analysis (environmental impact)	159
analysis (ex post)	276
analysis (figure ground)	126
analysis (function)	371
analysis (history, morphological)	63
analysis (history, style critical)	63
analysis (history, technical)	63
analysis (map)	432
analysis (morphological)	125
analysis (perception)	241
analysis (plan)	58
analysis (plans)	33
analysis (representations (design))	238
analysis (solution (sub system))	58
analysis (source materia)	138
analysis (synthesis)	355
analysis (typological)	125, 133
analytical and synthetic ways of working	311
analytical drawings	130
analytical evaluation	143
analytical or comparative research	137
analytical representation	238
analytical-systematic methods	371
and (operator)	199

andante (ongoing) research	160
Andeweg	43
anecdotes	419
Anglo-Saxon	414
angular twist (urban area)	430
animal behaviour theory	414
animal behaviour (research)	415
ANN	378
anonymously	392
anorexia architectura	407
Ansombe	189, 447
antecedent	113, 411
anthropocentrism	414
anthropometrics	275
anthropomorphic	67
anthropomorphic system	348
anticipation (long term experience)	163
anti-metropolitan policy	496
Antiquity (mythology)	67
Anymo-system	167
apartment	310
apartment buildings (load-bearing construction)	342
apex	124
apology of a design	174
appliances (sub-contractors)	354
applicable	82
application environment (technical)	355
application orientated	359
application potential	60
application study	330
application-related study (effects (heating, ventilation, airconditioning, HVAC))	329
applications study	327
applied combinatorics	417
applied mechanics	346, 464
applied mechanics (vector)	211
applying	395
appointments (reduction (location, time))	447
appreciation	158
approach (three-way)	313
approval of authorities	372
appurtenance (carrier)	349
Arbitration Board	82
Arbodesluit	81
Arc de Triomphe	446
arcade game	232
arch (triumphal)	67
archaeology	415
Archer, B.	100
archetypal forms	487
archetypal shape	110
archetype	75, 103, 106
arch-forms	402
architect	360
architect	97
architect (analysis of buildings)	118
architect (ICT)	377
architect (initiative (reporting and linking back (exchange of information)))	338
architect (jargon)	404
architect (react (world, architects))	404
architect (result (process (design)))	417
architect (self-satisfaction)	405
architectonic design	336
architectonic forms (contemplation)	475
architectonic imaging	133
Architectonic Intervention	141
architectonic study	292
architectonic unity	435
architectonic whole	57
architects (computing)	364
architects (eccentricity)	357
architectural act (scale levels, media)	421
architectural analysis (normative models)	239
architectural circles (Amsterdam)	122
architectural composition (building elements, void space forms)	234
architectural construction	336
architectural design	234
architectural design management	427
architectural designers	357
architectural doctrines	239
architectural examples	387
architectural formal system	240, 241
architectural knowledge	98
architectural knowledge (redefine)	99
architectural magazines (concepts, de-	

sign tools	151	artefacts(documentation)	144	interest))	409	behavioural aspects	152	Boersma, S.K.T.	294, 298
architectural methodology	234	artefacts(handcrafted(refinement))	400	attitude in studying	358	behavioural mapping	275	Bogaers	59
architectural motives	67	artefacts(material)	367	attitudes(designer)	144	Beitz	370	Bohm, D.	100
architectural office	373	art-historical sciences	98	Atneave, F.	242	Bekkering, H.	161	Boîte à Miracles	477
architectural product	367	articles(frequently purchased)	268	attorney	82	belief	26	bolts	286
architectural product(personal ties)	369	articulated criticism	309	attraction(concentration(shopping cen- tres))	268	beliefs(popular(hidden burdens(ex ante evaluation)))	162	Bomarzo	67
architectural product(spatial experience)	368	articulating the site	433	attribute	40	Bell, D.	185	Bond Heemschut	83
architectural provisions(cimate control)	330	articulation	57, 114, 129, 234	audience	465	below	475	bond(brick)	120
architectural purity	392	articulation and performance(computerised representation(positioning(ele- ments)))	236	auditorium	112, 465	bench	483	bond(hinged, nodal)	286
architectural quality	151, 297	articulation of scale	190	augur	474	benchmarking	163	Bondt, J.J. de	372
architectural representations	233	articulation(basic)	440	AUP	129, 434	Benes, J.	152	Bonebakker, M.	342
architectural research	98, 249	articulation( façade)	425	Aurora	107	Bense, M.	241	Bont, N. de	374
architectural research(transparent, sys- tematic, descriptive)	99	articulation(history, elevation)	63	authentic	95	Bentham, J.F.A.K. van	194, 357	book(section)	44
architectural responses	389	articulation(site)	114, 439	author	62	Berg, M.A.M.C. van den	81	book(edited)	44
architectural scene	243	articulation(spatial)	242	author(designer, history)	65	Berg, R. van der	188	BOOM	313
architectural solution	107	articulation(surface)	188	author(history)	65	Berger, M.	215	border zones	282
architectural stereotypes	236	articulation(tentative)	440	author's name	46	Bergh, W.H.J. van den	328, 332, 473	border zones of academic enquiry	143
architectural system	108	articulation(vistas)	430	authorities(approval)	372	Bergman, H.	437	border (railway, road)	429
architectural transformations	321	articulations of surfaces	436	authorities(local)	81	Berkel en Rodenrijs	287	bordering of a site	418
architecture	61, 367, 404	articulations(basic)	439	Authors' Law	80	Berkel, B. van	357	borders of the given site	418
architecture and urban technology	346	articulations(site)	433	authorship(shared)	59	Berkhout	301	boredom(monotony)	170
architecture is interrogated	473	articulations(intelligence)	378, 382	autism	413	Berlage Institute	396	boring( façade)	426
architecture of the city	435	artificial light	335	autocratic	303	Berlage, H.P.	117, 119, 121, 123, 435	Borneo-Sporenburg	435
architecture(austere, Basel)	122	artificial lighting	332, 425	autogeneity	418	Berlin Wall	495	Borromini	67
architecture(brief, budget, site bounda- ries)	404	artificial neural networks	377, 382	automatism	416	Berlioz, H.	408	BOU	272
architecture(classical orders(canonisation))	234	artist	360, 408	autonomous	393	Berlyne, D.E.	240	bottle-neck(model)	468
architecture(classical arts(vvisual))	96	artistic form expression	379	autonomous natural process	370	Bertels and Nauta	182, 183	bottom glass line	325
architecture(Dutch, 18 <sup>th</sup> century)	118	arts	25, 297	autonomous position of the designer	434	Bertels, K.	181, 182, 183	bottom-up approach	104
architecture(fluid)	364	Arup, O.	61, 231	autonomous qualities	126	Besset	394	boulevard	480
architecture(geometry)	232, 245	as if design setting	101	autonomously continuing idea	418	best buy	165	boundary conditions	253, 272, 374, 436, 459
architecture(history)	61	a-select respondents	374	autopsy(history)	61	best in test	165	boundary conditions(budget, location)	276
architecture(minorities)	420	ASHRAE	330	auxiliary lines	290	bestemmingsplan	81	boundary conditions(optimisation)	221
architecture(modernist)	234	ASHRAE Journal	330	available data	333	beta sciences	379	boundary values(housing)	165
architecture(physical protection, spiritual ordering)	474	ASHRAE Transactions	330	avenue	423	Betha way(natural rules)	491	Bouwregulegeving	81
architecture(relationships between ele- ments)	234	aspiration(level)	295	avenue(straight)	423	Beunder, M.	154	box of miracles	480
architecture(routine)	390	Asselbergs	283	average	219, 253, 255	Beurs van Berlage	118, 119	Box of Miracles	477
architecture(sensual, physical)	421	assembled	108	averages(condensing)	219	Bhalotra, A.	435, 439	box of miracles	477
architecture(sterile)	286	assembled(post)	281	AVV	259, 497	Biaostocki, J.	67	box(building)	408
architecture(urban)	287, 433, 461	assembling	350	axioms	204	bias(ideological)	430	box(protruding)	426
architecture-historical studies(history)	61	assembly(on-site)	281	axis of the tower	123	bias(valuation)	167	boxes(metal)	391
archive	122, 423	assertions	191	axle	223	BIC	117	box-office	470
archive(analysis of buildings)	117	assertive(consumers)	311	axometrie	116	bicycle	393	boys meet girls	350
archive(architects offices)	118	assessment	254	Aymonino, C.	125	Biederman, I.	235, 243	BPE	276
archive(history)	62	assessment criteria	365	<b>B</b>		big shopping centres	269	BPO	152
archive(image)	50	assessment of alternatives	168	Baarda & De Goede	138, 249	Bijlmermeer	59, 188	Brachman, R.J.	233
archive(municipalities)	118	assessment(context)	399	Baarda, D.B.	24, 53, 54, 138, 155, 249	Bijlsma, L.	135	bracing structures	342
archive(private collections)	118	assessment(costs)	372	Baarsjes	445	Bijvoet, B.	394, 465	brackets(steel angle)	279
archiving	381	assignment	443	back	170	Bilbao	380	brain-storm session	429
arcs(graph theory)	216	assignment(analysis of buildings)	118	back-casting	159	Bilbao Guggenheim Museum	364	brainstorming	371
area in between(body, mind)	478	assignment(design)	159	back-drop	114	Bildung(history)	70	branch(incident)	217
area(essence)	429	assignment(interpretation)	107	backside(closed)	429	binary numerals	233	branch(inciding)	217
area(maps)	429	assignment(part) (plan(spatial), pro- gramme of requirements)	340	Bacon, Francis	21	binding theme	141, 485	branches (dual)	217
area(potentials)	267	associate	477	Badt, K.	62	Binford, T.O.	243	branches with a length(graph theory)	218
areas	441	association	390, 395	Bakel, A.P.M. van	97	binocular disparity	244	branches(graph theory)	216
areas of restructuring	433	Association Deltametropolis	498	Bakker, L.	185	biology	414	Brand, S.	161
areas(spatial)	347	association test	476	Bakker, P.J.	154	birds eye view	464	Brandes, E.	437
arena	480	association(private)	492	balance(perception)	241	Birkhoff, G.D.	240, 241	Brechner, E.	382
Argan, G.C.	103, 113, 417	association(significant, meaningful)( key-words(from the gut))	476	balanced attention	306	bisecting the organisation(building)	424	Breen, J.L.H.	95, 97, 102, 137, 139, 142,
argument	192	association(useful)	403	balconies	112, 392	black box	308	483, 485	
argumentation theory	192	associations(chain)	394	balustrading	392	black box design	365	Breuer, G.S.	154
Ariadne's thread	482	associations(clearing out)	393	bandwidth(scenarios)	162	blind spot(urban)	132	brick	123, 348
Aristotle	26, 418	associations(farfetched(eclectic spirit))	239	band-with	212	blinding	336	brick format(Waal)	119
arithmetical series	212	associative methods	340, 371	Barbieri, S.U.	57, 152, 212	blob architects	357	brick heads	120
arithmetic	203, 204	associative qualities(curved lines and surfaces)	487	Barcelona-paviljoen	407	blob designs	364	brick module	348
arithmetic optimum	297	associative representations(atomistic)	237	barrier(transparent)	284	blobs	487	brick strips	111
arithmic rules	207	associative structures(holistic)	237	Basic	229	block	116	brick wall(dual)	281
Arman, Y	392	assumptions	417	basic allocation method	440	block(building)	135	bricklaying practice	124
arousa(perceptual)	240	assumptions(transformative)	417	basic articulation(history)	440	block(closed, building)	135	brickwork	395
arousal(perceptual)	240	AST	346	basic human needs	358	block(end)	116	bridge	483
arranged	108	astonishment(outside world)	413	basis module M	348	blockades	415	bridge constructions	394
arrangement	234, 391	astronaut's suit	464	bathroom like	156	blockading pre-suppositions	35	bridge(impact(landscape))	485
arrangement of elements	235	astronomer's profile	446	bathrooms	217	blocking stimulus	415	bridge(organisation(bisecting(buil- ding)))	424
arrangement of values	447	asymmetry and symmetry	95	Bauer, H.	62	blocks(all-metal)	391	bridges(aerial)	325
arrangement possibilities	207	Asymptot	473	Bayreuth	113	blocks(building)	135	brief	27, 152
arrangement(combinatorics)	208	At least one(logic)	193	Bazel, K.P.C. de	119, 120, 121, 12	blocks(residential)	316	→ programme of requirement, specifi- cation, task	
arrangement(rectangular)	244	atmosphere	156	beams( façade)	325	Blokzijl, W.J.	43	brief(architecture)	404
arrangement(spatial)	107, 108, 109	atomistic associative representations	237	Bechtel, R.	53, 155, 394	Blom, P.	117	brief(development)	283
arrangement(urban)	130	atomistic form	233	Beckers	313	Blondel	239	brief(technical)	281
arrow(point, line)	477	atoms in the universe	207, 210	bed	292	blotches plan	434	briefing	271
art and science	21	atria	331	bedroom(sleeping(description))	292	Blueprint for a City	313	briefness(relative)	332
Art Deco	394	atrium	171, 468	begin to design(existing(accept, reject))	417	Blueprint for survival	313	broad-band technology	379
Art Nouveau	118	atrium building	326	begin, and the results will follow	408	blueprint for the city	461	Broadbent, G.	183, 203, 297
art of building(composing precisely)	123	attention(balanced)	306	beginning anew	417	blue-print(frame, grain)	211	Broek, E. van den	107, 134
art of omission(Michelangelo)	407	attention(effort)	240	beginning design	473	blue-print(history)	61	Broeke, R. van den	167
art(history, delight)	64	attention(range(monitor))	410	behaviour	292	blue-print(spatial model(thought model))	183	Broekhuizen, P.	132
art(knowledge and capability)	478	attention(selective)	25, 444	behaviour of people(adaptive(acclimatisation, clothing))	334	blueprints(cramped)	166	Broer, H.W.	257
art(preceding all science and knowl- edge)	473	attention(shifts)	404	behaviour theory(animal)	414	Blyth & Worthington	275, 276	Brooks, R.A.	235, 243
artefacts	414	attention(spread(alternating focus of interest))	409	behaviour(co-operative)	296	Blyth, A.	275, 276	Brouwer façade	347
artefacts(collection)	142					Bod, R.	241, 245	Brouwer, J.	346, 357, 387, 423, 443
						Boekholt, J.T.	59	Bruijn, W.N. de	275
						Boelen, A.	446, 449	Bruin	356
						Boer, N.A. de	433, 437, 439	Brundtland Report	181
						Boersma, J.J.	39	Brusatin, M.	125

Bruyn, R. de	416	building(healthy)	330	carrying structure	354	chapters	43, 46	classes(qualitative)	154
Büchi, H.	433, 438, 439	building(history(period))	429	cars(accessibility)	465, 468	character(context(mean))	255	classical	470
budget	404, 432, 464, 470	building(industrial)	346	Cartesian co-ordinates	203	characteristic details	445	classical buildings	234
budget(impact(pergola, sun-shades, less sophisticated types of material))	427	building(large)	433	cartesian cross	133	characteristic(immeasurable)	92	classical orders	234
budgetary pre-condition	251	building(maintained, adapted)	281	Cartesian grid	359	characteristic(spatial)	408	classical theatre	470
buffer zones	36	building(not)	331	Cartesian(Plato)	478	characteristic(values(independently varying))	447	classicism	119
build in space	337	building(parts and connections)	351	cartography	74	characteristics(most positive and most negative)	158	classification	35
build operate transfer	272	building(production, manufacturing)	281	cartoons	460	characteristics(nameable(verbale, denumerable, numerable, measurable))	447	classification boundaries	220
builder(persuaded(studies, examples))	427	building(realised)	143	case based studies	144	Charberlin, T.C.	162	classification of information, document processing	79
build-in space	336	building(shape)	327	case studies	277	Chareau	394	classification(buildings)	342
building block	135	building(suitable)	470	case study	20	charged(theme(surveying, watching, not seeing, overseeing))	476	classifying components	345
building block(open)	114	buildingelements(main)	345	case(defined(object, context))	493	charisma	295	clean slate	390
building blocks(programme of requirements, location)	291	building-lot	115	case(individual)	82	Chartres	67	cleaning windows	337
building checklist	328	buildings(classical)	234	cases	34, 79, 81	Chartres Cathedral	401	clear ground certificate	81
Building Code	151, 274	buildings(depth)	122	cases(design)	144	Chavasse Park	364	clearing out associations	393
building component	286	buildings(round)	115	cases(individual)	220	checking moment	372	cleavage in the area	430
building component(core(elevator, stairs))	489	building-trade documentation	347	Castells, M.	495	chemical glueconnection	356	cliché	389, 390, 395, 416
building component(special)	355	built and unbuilt	429	casuistry	34, 54	chess player	410	cliché(design(just beginning))	408
building components(special)	355	built environment	95, 249, 377	catalogue range of components	281	chief designer	359	clichés entrenched	406
building construction	346	built environment(legible)	25	catalogues(electronic)	380	child's experiments	414	client(analysis of buildings)	118
building cranes	342	built space typology	439	Catanese, A.J.	299	Chinese architecture(empty surfaces, circle, colour)	420	client's information	275
Building Decree	80, 81, 84, 350	built-in space(installations)	330	Cate, F. ten	83	Chinese community	419	Clima 2000	330
building design	279, 333	bull(head)	393	categories(pre-supposed)	444	Chinese sky-line	421	climate control	328, 330
building documents	231	Burchard, B.	380	categorisation	104	Chipperfield	473	climate control(installations, constructional facilities)(shape, architectural provisions))	330
building economics	346	burdens(hidden)	162	category	207	choice(first)	473	climate controlled façade	281
building elements(basic set)	233	bureaucratic procedures(viscous)	311	cathedral(gothic)	396	choice(freedom)	26, 500	climate façade	323, 423, 426
building elements(symbols)	233	burg	482	Catia	380	choice(optimum)	297	climate installations	330
building enterprise(history)	65	Burge, P.S.	328	Cauchy-sequence	226	choices(design)	109	climate(indoor)	330
building envelope	330	Burgerweeshuis	89	causal connection	201	choices(iterated)	296	closed and open	429
building façade sub-system	280	Burgh, A.H.P. van der	222, 301	causal correctness	254	choices(spatial architectural)	155	closed backside	429
building from scratch	323	burglary	158	causal explanation(logical form)	200	choosing of forms	58	closed building block	135
building function	330	Burt, M.E.	153	causal explanations(logic)	197	Chorley, R.J.	181, 183	closed wall(transparent roof)	285
building groups(partial)	349	bus route	316	causal lines	181	Christaller, W.	268	closure of spaces	56
building height	122	business management(empirical model)	417	causal pre-supposition	195	Christiaanse, K.	439	closure(perception)	241
building in use evaluation	328, 334	business parks	269	causal relation(intervention study)	328	chronological reporting and accounting	361	clothing	334
building in use study	335	business(location(rent)(price of the land))	267	causal relationship	207	chronology	62	Clowes, M.	235
building in-take	324	businesses(programme(attractiveness))	269	causal relationship(series of actions, result)	417	chronology(history)	62	Club of Rome	182, 494
building location	359, 372	business-plan	375	causal relationships(function)	225	church-yard	407	clues(lack)	145
building managers	359	but	199	causal(logical)	448	CIAM	69, 105	clustered diffusion	37
building mass	372	buying market building	360	causality	27	CIAM(functions(housing, employment, amenities, traffic))-classification	266	clustering spaces	275
building material(history, provenance)	63	<b>C</b>		causally	443	CIB	249	coarseness(drawing)	211
building material(ideal)	283	C	229	cause	27, 48, 448	Ciftcioglu	377	code(end)	242
building material(new)	283	cables	229	cause(complaint)	327	cinema	465	co-designers	282
building methodology	249	cabing	337	cause(immediate)	405	cinema room	465	coding efficiency	244
building node	321, 345	CAD	21, 210, 298, 378	causes(possible) of complaints	327	circle	215, 420, 475	coding of a floor plan	242
Building Node Study	351	CAD / CAM	350	causing the problem(thought)	327	circle(shape(simple))	215	coding operations	242
building part	279, 347	CAD documents	238	CBD	495	circle(triangle)	417	co-efficients	225
building parts	279, 280, 282	CAD system	334	ceiling(false)	332	circuit(graph)	231	Coenen, J.	365, 435, 439
building parts(groups)	347	CAD systems	372	cells	170	circul(factor)	213	cognitive studies of vision(parts, modules)	235
Building Performance Evaluation	152, 276	CAD-CAM	378	cellulose(isolation)	427	circular conference room	424	cognitive-psychological	58
building permission	81	CAD-files	49	Centrala Beheer	395	circular design	479	coherence	60
building permit	81	CAE	378	Centraal Beheer building	395	circular reasoning(evaluation ex ante)	187	coherence in our movements	415
building practice(Dutch 20th Century)	117	Café Wasserman	467	Central Park	188	circulation factor	269	coherence(formal)	430
building process	271, 372	Cairns	408	central place theory(Christaller)	268	circumference(programme(quantity))	215	cohesion(system)	218
building process(ongoing)	356	Calatrava, S.	379	central staircase	424	circumscription(panorama)	474	Cohler	104
building process(programme of requirements(completeness))	272	calculation of variances	209	central space(mass)	131	circumstances	473	co-incident	416
building product enterprise	373	calculation(differential)	205	centralisation	105	circumstantial evidence	137	co-incident(historical)	417
building products(standard)	355	calculation(infinitesimal)	205	centralised	105	citation	43	collaborative & concurrent engineering	378
building sector(fragmented, old-fashioned)	379	calculation(integral)	205	centrally(localised(programme(quantity)))	215	cities in the delta	500	collaborative design	382
building services	327	calculus(differential)	228	centralspace(flanking)	242	cities(independent, fields of influence)	498	collaborative engineering	379
building site	341, 347, 350	calculus(formal model)	183	Centre for the Arts & Culture	465	city building	496	collage	393, 402
building specification	109	calculus(integral)	228	centre(city)	268	city centre	268	collection of images	402
building system	282, 355	calibration	257	centre(old)	430	city hall	287	collective activities(research(design project based))	141
building systems( unconstrained transition(eclectic spirit))	239	Callas	419	Céramique	435, 439	city map(composition(spatial), component(design))	439	collective garden	135
building technique	109, 321	Calvino, I.	476	certainty(pseudo(numbers))	187	city shape models	438	collective memory	106, 402
building technology(context, multidisciplinary complexity, cultural sensitivity, basic human needs, execution, traditional materials, entrance level, enterprises(small-scale), competitiveness, low final product costs, focus on straight applications, low studying altitude)	358	Cameron	260	certification	365	city(form)	125, 126	collective outcome	296
building volumes	487	canal house	119, 124	ceteris paribus	204, 255, 447	city(founding)	474	collective space	135
building(achievements)	149	canals	127	ceteris paribus(incompleteness)	189	city(planning(human achievement))	491	collective welfare	300
building(adaptable)	310	Canho, M. del	167	Cézanne	399	city(river)	134	colonies(Greek)	203
building(analysis)	117	canonical orientation	243	CFD	334	city(extension)	121	colonnade	244
building(capable to adapt(exhibition concepts))	462	canonical views	245	Chadwick, G.	298	Civil Code	82	colossal pictures(film and television company)	161
building(classification)	342	canonisation(classical orders)	234	chain(decision making)	280	civil engineering	279	colour	95, 336, 391, 420
building(component)	233	Canter, D.	95	chalk and sketching paper	432	civil liberties	79	colour and texture(front)	289
building(consistent)	470	cantilever	393	chance	429	clad	394	colour(context)	394
building(dynamic properties)	330	cantilevering roof	407	chance density	219	claddings	280	colour(possible)	208
building(existing(actuality, historical data))	117	Cantor(fractal)	226	chance of an event	219	claddings(load-bearing construction)	280	colours	394
building(existing)	394	capability(internal)	374	change	447	claims(compensation)	81	colours(number(required))	210
building(extended(adding parts))	424	capacity plan	173	change of abstraction	190	claims(suing)	80	column	121, 392
building(function)	341	capacity to adapt	395	change(succeeding values)	226	clairvoyant moments	459	column placed out of the façade	324
		capacity(conceptual)	414, 415	changes(temperature)	334	Clark, R.H.	24, 90	column(detailing(form(pencil)(column(60cm), wall(25 cm))))	463
		capacity(heating)	334	changing functions	277	Clarke D. M.	414	column(glass)	286
		capacity(installations)	330	changing requirements	455	class intervals	256	column(steel)	394
		car industry	365	chaos	413	class logic	192	combination	417
		card(demonstration)	130	chaos function	256, 257	class(accuracy)	212	combination of pieces	391
		care and service provision(logistics)	310	chaos theory	448	class(scale values)	154	combination of strategies	296
		care centre	310	chapler(numbered)	43			combination of sub-solutions	297
		care(home)	310					combination possibilities	219
		Carp, J.C.	348					combinational explosion	295
		carrier(appurtenance)	349					combinations and quantities	389
		carrier(equipment)	349					combinations possible	341



combinations without repetition	210	comparison(designerly)	145	testing(reflection, selection, reduction, perfection))	97	concept(organisation(tri-partition))	424	confrontational methods	340
combinations(mathematics)	210	comparison(ground)	91	composition(feeling)	430	concept(outmoded)	389	confusion of observation standpoints	188
combinations(parts)	101	comparison(previous cases)	33	composition(form(form))	93	concept(placed on the location)	424	confusions(linguistic(spatial-temporal completeness, logical consistency, public urgency))	189
combinations(possible)	219	comparison(scale)	368	composition(formal)	492	concept(planners, designers)	186	congresses(international)	330
combinatorial explosion	208	comparison(systematic)	137	composition(history)	63	concept(planning)	186	congruency	216
combinatorial geometry	215	compartmentalisation	336	composition(knowledge, understanding)	96	concept(pre-determined)	89	conjunctions(strange(eclectic spirit))	239
combinatoric explosion	20	compensation claims	81	composition(material)	370	concept(scientifically verified)	285	connectedness	439, 493
combinatorics	203, 207	compensation principle	300	composition(original)(with well-known components)	357	concept(sentence)	108	connecting	347
combinatorics(applied)	417	competence(study)	28	composition(scale-dependent)	445	concept(space of the idea)	405	connecting element(exhibition space)	467
combinatorics(arrangement)	208	competition	368	composition(spatial)	128	concept(spatial(rough design))	185	connecting factor(visual arts)	470
combinatorics(variations)	208	competition on the marketplace	418	composition(subsolutions)	95	concept(spirit)	309	connecting idea	468
combinatory explosion	303	competition(design)	141, 359	composition(triadic)	237	concept(theme)	108	connecting lines	216
combine or analyse(functions)	448	competition(potential)	374	composition(wedge(angular twist), circle(triangle))	430	concept(transformation, interpretation)	390	connecting technique	337
combined	340	competition(states, city-regions)	500	compositional aspects(architectural artefacts)	144	concept(type)	116	connecting(building parts)	425
combined controle	336	competitiveness	358	compositional aspects(interplay)	99	concept(underlying)	406	connection	105, 316, 419, 441
combined(components)	347	compiled scorings	163	compositional categories	485	concept(usage)	324, 326	connection detail(façade(weight, loadings), elevation, installation)	279
combining	430	complaint(explanatory)	327	compositional means	89	conception	87, 100, 139, 185, 443	connection details	445
combining sub-solution	341	complaints	327	compositional task	35	conception(design)	297, 302	connection(cross)	133
come-back of an idea	290	complaints(influence(inhabitants)(climate control, shading installations, windows))	328	compositional themes	142	conception(elaboration)	417	connection(facts)	250
comfort	367	complaints(inner climate, behavioural aspects (lack of space, privacy, social contact))	151	compositional variation	141	concepts	35, 36	connection(number of kinds)	345
comfort and usage	330	complaints(possible causes)	327	computational fluid dynamics	334	concepts(formation)	415	connection(open)	326
comfort requirements	330	complaints(prevention)	338	computational studies(proscriptive approach)	246	concepts(functional, experiential, ecological, decisional)	437	connection(points)	441
comic books	245	complaints(unexplained)	327	computer	291, 432	concepts(lack)	33	connection(subsystem)	281
comic strip	247	complement	438	computer aided design	21, 298	concepts(ordering)	429	connections	370
command(language)	194	complete graph	217	computer aided techniques	97	concepts(overlapping)	38	connections(glass, metal)	286
commercial development process	369	complete induction	191	computer applications(isolated problems)	231	concepts(sticking)	303	connections(international)	494
commercial facilities	135	completeness	189, 243	computer drawings	477	conceptual (verbal, mathematical, spatial and mechanical models)	183	connections(multiple)	217
commission	465	completeness(spatial, temporal)	189	computer floors	337	conceptual capacity (pattern, process)	414, 415	connections(separations)	368
commission(acquisition)	427, 432	completion	347	computer model	275	conceptual design	377	connectivity(lost(mathematics))	205
commission(disciplinary)	473	complex forms	379	computer models	333	conceptual model	183	connectivity(multi-level representations)	237
commission(history)	65	complex numbers	226	computer programs	415	conceptual(pre)	473	conregio	475, 480
commission(interpretation(top-down))	474	complex(construction)	408	computer screen	411	concert hall	407	conregio(projecting(directed diagram))	476
commission(interpretation)	474	complexity	95, 120	computer screens heat load	332	conclusion	329	consensus	302, 433
commission(national buildings service)	460	complexity in simple formulas	406	computer administrative task	379	conclusion(logical, causal)	448	consensus(arrangements, appointments)	189
commission(professional, curiosity)	473	complexity(number of elements)	240	computer(ergonomics)	232	conclusion(premises(true))	191	consequence	48, 390
commission(without problem)	473	complexity(parametric)	242	computer(repetitive tasks)	379	concordance	119	consequence((potential, awareness)(design))	491
commissioned studies	329	complexity(perception)	240	computer(sketches)	287	concrete	395	consequences(desired, undesired)	159
commissioner	276	complexity(perceptual)	240	computer-aided architectural design	234	concrete beams	464	consequences(not anticipated)	159
commissioner(history)	65	complexity(reducing)	141	computer-aided architectural design	234	concrete freedom	474	consequences(possible)	162
commissioner(immaterial intentions(concrete pictures))	459	component	25, 279, 321, 433, 445	computerisation(visual representations)	231	concrete model	183	consequences(probable)	159
commissioner(presentations, wishes honoured, consistent building)	470	component design	279	computing architects	364	concrete walls(crude)	392	consequences(spatial)	433
commissioning(years)	470	component designer	360	concatenated techniques	360	concrete(abstract)	474	consequences(political or social)	430
commitment	296	component design	360	concave	243	concrete(granulated)	427	consistencies	144
common law	81	component developer	282	concavities(matched)	243	concurrent designing & engineering	363	consistency of the design	436
common object	392	component development	355	conceivably	243	concurrent engineering	364, 378, 379	consistency(associations)	476
communicating the results	144	component of a building(purpose in society)	405	conceivable developments	162	condensation(heterogeneities(air))	418	consistency(causal)	189
communicating vessels	449	component of a building(purpose in society)	405	concentrated	105	condensing(averages)	219	consistency(conception)	443
communicating(visual representations)	231	component (building)	286, 489	concentrating(functions)	324	condition	21, 41, 48, 390	consistency(incompleteness)	189
communication	58, 281, 330, 378	component(design)	439	concentration	40, 494	condition(future)	491	consistency(logical)	189
communication with the commissioner(models, simple drawings)	459	component(elaboration(concept))	406	concentration(shopping centres)	268	condition(hierarchy)	280	consistency(varying(increasing, decreasing))	189
communication(checklist(frame(structure), route, space, place, element, orientation))	441	component(installation)	333	concentric way(process)	369	condition(necessary)	196	consistent (balanced) design	437
communication(exchange, relation)	306	component(load carrying)	345	concept	35, 87, 88, 90, 95, 107, 108, 109, 110, 287, 288, 340, 389, 406, 414, 416, 439, 443, 444, 460	condition(sufficient)	196	consistent building	470
communication(installations)	337	component(nominal radius(1/3 composition))	445	concept defining	90	condition(task, site)	405	consistent(complete, not mutually excluding or overlapping, complementing)	438
communication(internal, framework)	364	components	12, 35, 36	concept formation	36, 89, 92	conditional analysis	41	consistent(data)	144
communication(open)	338	components offered on the market	357	concept guides the elaboration	406	conditional positioning	42	consistent(made)	189
communication(platform)	306	components(classifying)	345	concept may be a compass	406	conditional sequence	254	consistent(themes)	485
communication(professional discipline, culture, life-style)	305	components(clusters)	353	concept of freedom	491	conditionality	27, 260	conspicio	475, 476, 479
communication(steerage)	311	components(connected, connecting, joining, linking, coupling, fitting, interface)	347	concept of autonomy	405	conditionality(focus)	42	conspicio(playing the game)	476
communicative function(methodology)	363	components(custom)	380	concept(articulating an idea)	408	conditioning(position designer)	434	constant structures	56
communicative function(urban design)	436	components(disparate)	393	concept(autonomous)	408	conditioning(professional)	473	constellation	36, 90, 104
compact form of building	170	components(disregarded)	190	concept(banana-concept)	427	conditions	25, 56, 389, 411, 448	constellation(diagram, prototype)	445
compactness(code)	243	components(focus)	42	concept(commissioner)	459	conditions for solutions	443	constellations(urban)	494
comparability	92, 168	components(individualisation)	365	concept(concentrate the essence(conditions(task, site)))	405	conditions(circumstances)	200	constraint	291
comparable	20, 55, 57, 82	components(separating)	345	concept(conditions to fulfill)	411	conditions(context)	41	constraint propagation	238
comparable buildings	250	components(separating)	345	concept(conditions)	405	conditions(controlled)	328	constraint(budget, method of building, image)	291
comparable situations(rulings)	82	components(focus)	42	concept(consistent package of design ideas)	438	conditions(housing)	165	constraint(decisive(location, number of homes))	432
comparable(design)	141	components(individualisation)	365	concept(detailing)	460	conditions(implicit)	254	constraint(iterative)	235
comparable(designs)	92	components(separating)	345	concept(drawing)	423	conditions(limiting)	339	constraint(vital)	427
comparable(images)	28	composer(aesthetic)	361	concept(empirical)	190	conditions(pattern)	442	constraints	95, 254, 300, 301, 302, 483
comparable(size, usage, inhabitants composition)	328	composer(musical)	360	concept(encompassing)	306	conditions(social)	309	constraints(design)	485
comparative analysis	58, 123, 155, 277, 396, 455	composer(unable to play the piano)	408	concept(enduring structure(infill(changeable)))	405	conditions(task)	405	constraints(local)	299
comparative design based research	144	composing at the keyboard	408	concept(exhibition)	462, 473	conditions(technical)	254	constraints(optimisation)	221
comparative floor-plan analysis	155	composite	285	concept(form)	433, 436, 440	conditions(varying)	209	constraints(programme)	95
comparative research	144	composition 12, 87, 92, 108, 109, 125, 139, 440	440	concept(formulating)	309	cones	487	constraints(spatial)	236
comparative studies	143	composition analysis	445	concept(frame, grain)	211	conference room(circular)	424	constraints(workshop project)	141
comparative study	165	composition principle	345	concept(geometrical)	190	conference space	423	constrictions(zoning)	424
compare	55	composition research	139	concept(history, spatial)	63	conferences	249	constructed(clues)	145
compared(drawing)	29	composition research(design driven(types))	137	concept(idea(discovery))	405	configuration	113, 114	construction	92, 396, 464
comparing	60, 251	composition(details(constellation, proportion))	445	concept(idea(layers))	405	configuration(overall)	235	construction and function(idea)	408
comparing(political options, design)	494	composition(analysis)	160	concept(ideological basis, formal aspects)	431	configuration(repetitive)	244	construction materialisation	26
comparison	102, 372, 396	composition(components(means of design))	433	concept(interpretation)	406	configuration(selective mental aggregate)	236	construction component	279
comparison and selection	484	composition(design elements(frame(structure), route, space, place, element, orientation))	441	concept(metaphoric)	109	configuration(spatial)	153	construction management	417
comparison(criteria(drawings))	29	composition(development, testing(reflection, selection, reduction, perfection))	97	concept(model(reality(future)))	185	configuration(symmetrical tripartite)	242	construction material	341



construction of models	415	context(location, performance criteria, pre-requisites, legislation, actors)	456	corners(straight)	204	creative imagination(spontaneity within structures and rules)	474	cultural pre-suppositions(models)	181
construction planning(scale)	279	context(management, culture, economy, technique, ecology, time, space)	38	corporate identity	273, 324	creative imaging	96	cultural scenarios	259
construction technique	321	context(material, social)	90	correctness(history)	62	creative methods	371	cultural sensitivity	358
construction time	342	context(object)	443, 455, 493	correlation	207	creative organisation	95	culture	97, 254
construction(building)	346	context(optimisation)	221	correspondence(causal working(probability))	204	creative phase	340	culture and nature	110
construction(elements(moving(doors, windows, walls)))	280	context(original)	67, 393	correspondence(conditional working(possibility))	204	creative products(personal events, anecdotes, passion, urge for survival)	419	culture of architectural design	250
construction(elements)	113	context(perception)	443	correspondence(set)	204	creative solutions(method)	340	culture(changing(conditions, values))	389
construction(existing)	420	context(significance, history))	67	corridors	289	creative(artistic logical)	100	culture(making into a place(non-place))	474
construction(floor)	343	context(situation, site, programme of requirements)	89	corridors(dimensioning)	218	creative(imaginative rational)	100	culture(pre-suppositions)	416
construction(glass)	286	context(social)	57	cortumio	475, 480	creativity	340, 389, 413, 416, 437	Cuperus, Y.J.	263, 279, 281, 345, 503
construction(hierarchy)	279	context(style)	64	cortumio(judgement(signs, template))	476	creativity centre	465	cupola	170
construction(infrastructure)	280	context(system of significations, field, paradigm)	400	cosiness	56	creativity(combination, rejection generally accepted pre-suppositions)	417	curiosity	396, 401, 473
construction(life-span(scale))	280	context(technical)	91	cost	455	creativity(designer's(support(representation(computerised)))	236	current state	372
construction(load bearing)	280	context(urban architecture)	424, 459	cost and benefits	299	creativity(fixed, open-ended)	396	curtains	336
construction(load-bearing)	339	context(urban)	288, 289, 427	cost control	333	creativity(improvising)	481	curvature(negative)	243
construction(significance)	325	context-dependent local problems	448	cost-effective	368	creativity(result(pattern), action (process))	417	curve fitting	253
construction(systems, subsystems, building parts, components, elements)	279	context-independent	368	cost-effective design	275	creativity(rules)	474	curve surfaces	487
construction's influence on the form	396	contexts	20	costing calculation	466	creativity(structure)	474	curve(moving and rotating)	487
constructions(finishing)	331	contexts of assessment	399	costing projections	309	creativity(transformation(meaning))	394	curved aluminium panels	364
constructions(load bearing)	331, 345	contexts(future)	251	costing(estimate)	465	creativity(amenities)	267	curved avenue	424
constructions(partition)	331	context-sensitive	449	cost-quality test	342	criteria	101, 343	curved form	430
construction-technical design	321	contextual scheme(scale, aspect(social, physical))	263	costs	171	criteria(accessible)	371	curved lines and surfaces	487
constructive diagram	440	contextuality of 'general' statements	447	costs per cell(prison)	372	criteria(aesthetic)	307	curved road	423
constructivism	407	contextual Europe	414	costs(assessment)	372	criteria(assessment)	365	curved surfaces(freely(single, double))	487
constructor	464	continuation(perception)	241	costs(development)	281	criteria(decision)	294	curves(logistical)	229
constructor(history)	65	continuous language of forms	326	costs(initial building)	167	criteria(designer's)	165	curving in opposite directions	488
constructor(CT)	377	continuousness	215	costs(investment)	167	criteria(evaluation)	163	curving in the same direction	488
constructor(meeting)	427	contours of the design solution	437	costs(life cycle)	167	criteria(norms(objectives(values))	254	custom	293
consultancy(software(building and planning))	167	contract	81, 83	costs(running)	167	criteria(operational)	371	custom components	380
consultant(process)	306	contract(European)	427	Council of State	82	criteria(ordinal)	370	custom manufacturing	380
consultant's experience	275	contract(one sheet A3)	427	counselling method	102	criteria(redundant)	371	custom production	380
consultants(analysis of buildings)	118	contract(standard)	81	countable	448	criteria(self-imposed(students))	396	Cusveller, S.	126
consulting companies	335	contracted graph	217	counter-example	195, 198	criteria(significant(expected))	159	cut through	217
consumer	368	contraction	217	counter-intuitive(geometry)	215	criteria(taste)	96	cut-out space	475
consumer inquiries	269	contractor(analysis of buildings)	118	counting(double)	205, 206	criteria(valid)	371	cutting out(tem)	475
consumer(building)	357	contractor(CT)	377	counting(equality(supposition))	205	criteria(verbally)	370	Cuypers, P.	118
consumer's risk	212	contradiction	194	counting(numbering(serial))	205	critical	22, 494	cycle of experience, action, experience	415
consumer's study	374	contrast	110, 418	counts	207	critical idealism	414	cycle(nested)	444
consumer's test for housing	163	contrast and order	95	coupling	347	critical scientific study	155	cycles(graph theory)	217
consumer's test(residential)	165	contrast scenarios	259	course of the sun	475	critical uncertainties	162	cyclic processes	58
consumer's law	274	contrast(perception)	241	courses and headers	119	critical, contemplative science	307	cyclical network	218
consumers(asserive)	311	contrasts in the appearance	336	Court of Justice	82	critical-path method	218	cyclical(buiding process)	272
contact lens problems	327	control functions	229	court(enclosure)	477	criticism	33, 52	cyclists	316
container aspect	391	control hierarchies	380	court(urban inner)	135	criticism process	307	cylinder	489
contamination	337	control population	328	courts	115	criticism(articulated)	309	cylindrical core	489
contemplatio	474, 479	control(personal(physical systems(heating, ventilation)))	170	covenant on the future(conspicio)	475	criticism(functionalistic design)	125		
contemplatio(conregio, conspicio, cortumio)	475	controlled on-site	281	cover	43	criticism(history, style)	62		
contemporary	66	connaescent home	310	cover the streets	325	criticism(invitation)	305	Daedalus	476
contemporary products	143	convenience	108	Cover, R.	381	criticism(literature)	68	Daedalus(technè(architect, engineer, artist, inventor, maker))	479
content	441	convention	291	covering objectives	371	criticism(plan)	125	Dalbè	394
content analysis	56	convergence of ideas	260	CPB	259, 497	criticism(typological)	103	Dale, J.H. van	437
content of a design	437	convergence phase	339	CPB scenarios	259	critique	52	Dalen, J. van	207
content of a design(design levels)	434	convex	243	Craals	257	critique of architecture	69	Damrak	123
content of an urban architectural plan(designing, ordering)	433	convexity/concavity	235	crack branching	285	critique(process)	306	Dapper neighbourhood	127
content(components, composition)	433	cook	166	crack growth	285	cross	475	data	339
content(intrinsic quality of the objects of the environment in their context)	441	cooling capacity	334	cracking behaviour	212	cross bond(brick)	120	data based design	169
content(process)	306	co-operate	296	crack-width	212	cross referencing	145	data collection	155
content(relation)	305, 306	co-operation	296, 436	cramped blueprints	166	cross section of the collection	402	data communication installations(vision of the future)	337
contents(table)	46	co-operation(enforcement(central, commitment))	296	cranes(building)	342	cross-breeding(mental)	405	data designstage	333
content(design)	455	co-operative behaviour	296	creating a need	368	cross-connection	133	data from the site	444
content, 20, 21, 25, 38, 51, 98, 110, 172, 254, 287, 289, 358, 391, 394, 406, 416, 419, 423, 431, 449, 455		co-ordinate organisation(Euclidean)	244	creating as a philosophical category	478	crossing(node)	218	data mining	382
context of contemporary debate	143	co-ordinate system	473	creating designs	300	cross-references	11	data of several researchers	334
context of factual originating(history)	64	co-ordinated levels(multiple(network of elements(top)))	238	creating(Christian version)	479	cross-referencing	143	data used(quality)	161
context of invention	20	co-ordinates(Cartesian)	203	creating(design)	478	cross-section	287, 289, 465, 476	data(aggregate)	55
context of society	405	co-ordinating devices	237	creating(mythological figures)	479	cross-section(urban space)	431	data(available)	333
context of the object	20, 443	co-ordinating devices(relationships and constraints(legal codes and regulations, professional knowledge(internet)))	238	creating(poiësis, technè, praxis)	478	cross-section(vertical fitting)	467	data(design)	145
context of the originating	69	co-ordinating devices(visual processes)	235	creating(questions)	473	cross-type	170	data(fixed)	300
context relevant to its significance	12	co-ordination	415	creating(spontaneity, edge(possible(randomness, determinism), real))	474	Crouwel, W.	357, 465	data(free)	300
context sensitive	20, 26	co-ordination and integration	359	creation(game)	474	crucial details	446	data(history, contextual)	62
context varies	455	co-ordination and integration (Building)	117	creation(problem)	473	crude concrete walls	392	data(interpretation)	138
context(action)	305	co-ordination constrains	236	creative conceptual capacity	416	Cruylf	419	database	205, 334
context(assignment, programme of requirements)	443	co-ordination devices	237	creative conceptual capacity(goal-oriented, means-oriented)	418	crystal(growing/dislocation in its grid))	189	database(interface(description(performance)))	351
context(broader, history)	67	co-ordination(modular)	345, 347	creative conceptual capacity(expressionism, impressionism)	418	crystal(growth(imperfection))	119	databases with reference projects	172
context(conditions for solutions)	443	co-ordinating devices	237	creative conceptual capacity(heterogeneity, autogeneity, heterogeneity)	418	crystalline structure	285	databases(linguistic)	49
context(dislocations(design))	418	co-ordinating devices	237	creative conceptual capacity(idealism, realism(relativism))	418	CSCW	378	dating	128
context(economical)	91	co-ordinating devices	237	creative conceptual capacity(identification)	418	cube	487	dating(history)	62
context(educational)	485	co-ordinating devices	237	creative conceptual capacity(rationalism, empirism)	418	cube(graph)	217	Davis, G.B.	294
context(focus)	42	co-ordinating devices	237	creative design(computer)	379	cubic content	227	daylight	122, 335
context(form)	89	co-ordinating devices	237	creative disciplines	479	Cullen, G.	439, 441	daylight and view	325
context(functional use, history)	64	co-ordinating devices	237	creative disciplines	479	cultural climate	96	daylight in the auditorium	467
context(history)	64	co-ordinating devices	237	creative disciplines	479	cultural developments	141	day-light studies	421
context(history, style)	66	co-ordinating devices	237	creative disciplines	479	cultural facilities	499	daylight(façade)	425
context(history, use)	66	co-ordinating devices	237	creative disciplines	479	cultural identity	494, 500	daylight(optimising(reflecting strips))	426
context(idea)	414	co-ordinating devices	237	creative disciplines	479	cultural landscape	131	daylighting	331
context(inventory)	443	co-ordinating devices	237	creative disciplines	479	cultural minority	420	De Stijl	89
context(learning)	338	co-ordinating devices	237	creative disciplines	479	cultural phenomena(ordering)	474	DE Wijk	313
context(liberating(object))	493	co-ordinating devices	237	creative disciplines	479	cultural poverty	172	dead end	432, 470

## D

dead ends	387	deductive sub-process	371	descriptive research	53, 138, 141	design methods	88, 295, 298, 339, 387, 433, 436, 444	design process(research potential)	140
dead weight	280	Deelder, J.A.	208	design	12, 19, 87, 255, 491, 492	design methods(decision process)	500	design process(research(steps(explicit)))	409
deadline	291	defect	296	→ plan		design methods(decision processes)	498	design process(sequential, network)	377
dealing room	497, 498	defence(water)	134	design 'on its own merit'	173	design methods(systematic)	295	design process(space)	362
Dear, N.	334	Défense, La	446	design action(firs)l	432	design of the organisation	444	design process(study by design)	459
debatable	496	defensive character	324	design action(first(urban model, programme of requirements))	459	design optimisation(multi-actor)	302	design process(sub-processes)	298
debate	12	deficits(housing, symptoms)	167	design actions(nameable, sequence(productive))	418	design options	144, 485	design process(topological deformation)	216
debate(attack)	13	define	55	design activities	35, 101, 355	design options(alternate)	143	design process(what?, why?, how?)	476
debate(contradiction)	14	defined concept	190	design activity	139	design options(simulated)	145	design processes(recorded)	361
debate(counter-example)	13	defining	39	design activity driven research	140	design orientated research	146	design processes(results)	143
debate(defensible)	13, 14	definition	33, 42, 447	design activity(aims)	95	design perspective	145	design products	95, 434
debate(Do you agree with me that...?)	14	deflections	342	design activity(conception)	443	design phenomena	144	design programme	494
debate(Do you mean, by this proposition, that...?)	13	deformations(topological)	216	design aids	379	design possibilities	207	design project based research	141
debate(fair)	13	deformations	379	design analysis(normative rule based, generative(sequence of design actions))	245	design problem	433, 442	design proposal(preliminary)	371
debate(foundation(communal))	14	degree(nodes(graph theory))	216	design analysis(normative rule based, generative(sequence of design actions))	245	design problems(new, advanced, complex, experimental, fast-track)	363	design propositions	95
debate(interpretation(implausible))	13	DeLaunay	390	design and build	272	design process	57, 107, 108, 168, 287, 327, 339, 370, 377, 417, 419	design re-construction	21
debate(new specification)	14	Delft	166, 329	design and decision-making		design process driven research	140	design reflections	140
debate(proposition(explaining))	13	Delft Media Group	142	tools(quality/cost		design process(acquisition, decisive constraint, budget(role), concept(requirement), sketching material, design action(first golden moment, great transformation, dead ends, period(indetermined design), method)	432	design related study	11, 21, 26
debate(proposition(more general))	14	Delft, D. van	182	assessment(levels(scale)))	167	design process(acquisition, decisive constraint, budget(role), concept(requirement), sketching material, design action(first golden moment, great transformation, dead ends, period(indetermined design), method)	470	design related study(admissibility(ethical))	28
debate(proposition(specifying))	14	Delftish stuff(reasoning)	421	design and research	97	design process(acquisition, decisive constraint, budget(role), concept(requirement), sketching material, design action(first golden moment, great transformation, dead ends, period(indetermined design), method)	427	design related study(documented(design))	27
debate(proposition)	13	delivery of stage props	465	design artefact driven research	143	design process(acquisition, decisive constraint, budget, golden moment, great transformation, dead ends, period(indetermined design), method)	427	design related study(effect analysis)	28
debate(return to his reservation)	14	Delivery(Just in Time)	350	design assessment	365	design process(acquisition, vital constraint, budget, golden moment, great transformation, dead ends, period(indetermined design), method)	427	design related study(effects(intended))	28
debate(scientific)	23	delphi method	260	design assignment	159	design process(allergies, frustrations, nightmares)	419	design related study(effects(unintended))	28
debate(social)	307	della	131	design attributes	101	design process(architect)	293	design related study(execution(technical))	28
debate(talking at cross-purposes)	13	delta landscape	500	design based research	140	design process(beginning(programme of requirements, context(urban architecture)))	459	design related study(experimental)	27
debate(tasks(division))	13	delta way(designers, engineers)	492	design capability(engineer, artist)	360	design process(conceiving rules, product)	492	design related study(feasible(economically))	27
debate(Was the specified proposition actually what you meant?)	14	Dellametropolis	492, 498	design cases	144	design process(development)	443	design related study(goal-directed)	27
debates(television)	13	Dellametropolis declaration	496	design choices	109	design process(dead end)	420, 427	design related study(possible (socially))	27
debris of the demolition	323	Dellametropolis(association(cities, chambers of commerce, waterboards, farmers' associations, associations for monuments of nature, national recreational association, housing corporations, employers association of Holland, transport company))	498	design contest	455	design process(de-blocked(halving the programme(most inspiring and promising part(personal(background, past))))))	421	design related study(probable (design))	27
decentralised	105	Dellametropolis(declaration)	498	design data	145	design process(de-blocked(steps back))	427	design related study(probable)	28
decimal numerals(Arabic)	232	Dellametropolis(market-situation(European Union))	500	design data(drawings, models, written information)	143	design process(deciding phase(requirements, risks))	492	design related study(prognosis)	28
decision areas(interconnected, analysis)	371	Dellametropolis(metaphor(connectedness, inter-action))	493	design data(intermediate)	143	design process(determinism, randomness)	478	design related study(programme of requirements)	27
decision as to spatial planning	435	Dellametropolis(metaphor(connectedness, inter-action))	493	design decision	34, 143, 151, 237, 360, 436, 443, 464	design process(development)	443	design related study(understandable)	27
decision control(open, democratic)	168	Dellametropolis(metaphor(connectedness, inter-action))	493	design decision making	140	design process(documenting)	446	design related study(viable(socially))	28
decision criteria	294	Dellametropolis(metaphor(connectedness, inter-action))	493	design decision(arguments)	161	design process(evaluation)	446	design related study(viable (technically))	28
decision making	59, 309, 433	Dellametropolis(metaphor(connectedness, inter-action))	493	design decision(history)	70	design process(ex ante evaluations)	330	design repository	133
decision making(chain)	280	Dellametropolis(metaphor(connectedness, inter-action))	493	design decision(risky)	338	design process(exploration phase(formal, schematic))	492	design representations	238
decision making(democratic)	299	Dellametropolis(metaphor(connectedness, inter-action))	493	design decision(without empirical evidence)	20	design process(exploration phase(indefinite and undefined aims and means, form))	492	design research	11, 12, 20, 89, 99, 103, 138, 155, 443
decision making(design)	140	Dellametropolis(metaphor(connectedness, inter-action))	493	design development (reconstructed)	143	design process(formal)	387	design research ex post	21
decision making(levels)	347	Dellametropolis(metaphor(connectedness, inter-action))	493	design development(monitored)	143	design process(industrial product, architecture)	367	Design Research Society	19
decision procedures(personal positioning, collective evaluation)	498	Dellametropolis(metaphor(connectedness, inter-action))	493	design dilemma	106	design process(information, adaptability)	163	design research(case(defined(object, context)))	493
decision process	124, 496	Dellametropolis(metaphor(connectedness, inter-action))	493	design directives(cities, neighbourhoods, residences, rooms and also the basic construction of minor building commissions)	442	design process(in-sight(intuition))	478	design research(existing examples)	443
decision process(leaps)	357	Dellametropolis(metaphor(connectedness, inter-action))	493	design document based research	144	design process(inventory, formation of the image, analysis of effect, decision to execute)	443	design research(references(explicit))	173
decision support	378	Dellametropolis(metaphor(connectedness, inter-action))	493	design domains	358	design process(methodical(programme of requirements), form(found))	292	design result analysis	143
decision support systems	160, 378, 382, 497	Dellametropolis(metaphor(connectedness, inter-action))	493	design drawing	287	design process(model, type, concept)	439	design rules	96
decision to execute	443	Dellametropolis(metaphor(connectedness, inter-action))	493	design drawings(history)	61	design process(phases)	116	design schemes	441
decision variables	301	Dellametropolis(metaphor(connectedness, inter-action))	493	design driven	95	design process(programme of requirement)	287	design school(intuitive, subjective, system(lacking), scientific (engineer))	419
decision(design)	151, 237, 360	Dellametropolis(metaphor(connectedness, inter-action))	493	design driven composition	137	design process(programme of requirements)	263	design sequence(edges, inner area, outside, inside)	430
decision(go / no go)	374	Dellametropolis(metaphor(connectedness, inter-action))	493	design driven research	95, 99, 137, 138, 485	design process(realisation phase(optimum solution(conflicting requirements)( technical design)))	492	design session	417
decisional(concept)	437	Dellametropolis(metaphor(connectedness, inter-action))	493	design education	415			design setting(as if)	101
decision-makers	293	Dellametropolis(metaphor(connectedness, inter-action))	493	design element(route, edge, areas, connection, landmarks)	441			design sketches(pencil, pen, A4 notebook(square ruled))	466
decision-making	293, 378, 443	Dellametropolis(metaphor(connectedness, inter-action))	493	design elements(translation(frame(structure), route, space, place, element, orientation))	441			design software	380
decision-making process(agenda)	446	Dellametropolis(metaphor(connectedness, inter-action))	493	design element(exercise)	494			design solution(contours)	437
decision-making process(political)	307	Dellametropolis(metaphor(connectedness, inter-action))	493	design expertise	145			design solutions(separation(consulting, examination)(efficiency, privacy))	156
decisionmaking(methods)	496	Dellametropolis(metaphor(connectedness, inter-action))	493	design idea	287			design stage(data)	333
decision-making(multi-party)	303	Dellametropolis(metaphor(connectedness, inter-action))	493	design ideas	289			design studio	373
decisions(better, quicker(Dellametropolis))	496	Dellametropolis(metaphor(connectedness, inter-action))	493	design images(relevance)	161			design study	12, 20, 21, 71, 89, 98, 101, 173, 330, 436
decisions(design)	346	Dellametropolis(metaphor(connectedness, inter-action))	493	design in strategic planning	492, 493				
decisions(human)	492	Dellametropolis(metaphor(connectedness, inter-action))	493	design incident	421				
decisions(intuitive)	356	Dellametropolis(metaphor(connectedness, inter-action))	493	design inspirations	291				
decisions(rational basis)	167	Dellametropolis(metaphor(connectedness, inter-action))	493	design intentions	144				
decisive constraint	432	Dellametropolis(metaphor(connectedness, inter-action))	493	design intentions(interpretation)	144				
decisive constraints	470	Dellametropolis(metaphor(connectedness, inter-action))	493	design intervention	88, 144				
decisive ideal(tri-partition(organisation))	427	Dellametropolis(metaphor(connectedness, inter-action))	493	design intervention(difference(drawings))	174				
decisive(ideas)	440	Dellametropolis(metaphor(connectedness, inter-action))	493	design intervention(inspiration(example))	467				
declarative function	205	Dellametropolis(metaphor(connectedness, inter-action))	493	design interventions(implications)	139				
decline(neighbourhood)	164	Dellametropolis(metaphor(connectedness, inter-action))	493	design interventions(minimum)	445				
de-cohesion	285	Dellametropolis(metaphor(connectedness, inter-action))	493	design laboratory	140, 485				
decompose the design	100	Dellametropolis(metaphor(connectedness, inter-action))	493	design language(personal)	438				
decomposing	101	Dellametropolis(metaphor(connectedness, inter-action))	493	design levels	434				
decomposition	58, 102, 129	Dellametropolis(metaphor(connectedness, inter-action))	493	design loop'	96				
decomposition analysis	133	Dellametropolis(metaphor(connectedness, inter-action))	493	design management	417				
decomposition method	439, 440	Dellametropolis(metaphor(connectedness, inter-action))	493	design means	89				
decomposition rules	233	Dellametropolis(metaphor(connectedness, inter-action))	493	design method(explicit)	369				
decomposition(deterministic)	244	Dellametropolis(metaphor(connectedness, inter-action))	493	design method(whole, part-products)	339				
decomposition(geons)	243	Dellametropolis(metaphor(connectedness, inter-action))	493	design methodology	58, 249, 293				
decomposition-analysis	133	Dellametropolis(metaphor(connectedness, inter-action))	493						
de-concentrated	105	Dellametropolis(metaphor(connectedness, inter-action))	493						
deconcentration	494	Dellametropolis(metaphor(connectedness, inter-action))	493						
deconstructed	414	Dellametropolis(metaphor(connectedness, inter-action))	493						
décor(office, living-room, bathroom)	156	Dellametropolis(metaphor(connectedness, inter-action))	493						
décor(psychology(consultation, examination))	156	Dellametropolis(metaphor(connectedness, inter-action))	493						
decorative elements	113	Dellametropolis(metaphor(connectedness, inter-action))	493						
decree(building)	80	Dellametropolis(metaphor(connectedness, inter-action))	493						
deduction	194, 199, 200, 250	Dellametropolis(metaphor(connectedness, inter-action))	493						
deduction(logical form)	200	Dellametropolis(metaphor(connectedness, inter-action))	493						
deductive	191	Dellametropolis(metaphor(connectedness, inter-action))	493						
deductive form(reasoning)	369	Dellametropolis(metaphor(connectedness, inter-action))	493						
deductive stage	128	Dellametropolis(metaphor(connectedness, inter-action))	493						





Draaisma, D.	182	Durand, J.N.L.	94, 417	effect(not intended)	187	empiricists	13	equal shape	216
Draak, J. den	161, 266, 448	dust-free painting workshop	465	effect(physical(spatial, ecological, technical) social(economic, cultural, political))	28	empy	25, 255	equality in nature	206
draft design(performance checks)	163	Dutch economy(trade, transport, finance)	500	effect(predictability)	162	emplacement(railway)	433	equality in the elements	448
draft(first)	314	Dutch National Central Planning Bureau	185	effect(programs, plans)	168	employment	269	equality pre-supposition(set theory, counting, mathematics)	206
drainage(surface)	315	Dutch New Movement 1924-1936	117	effect(solutions)	294	empty site	120	equality(perception)	241
draught problems(installations)	331	dwelling activities(construction(building, characteristics))	163	effect(transformation)	446	empty surfaces	420	equality(supposition(mathematics))	205
draw as you search	408	Dwelling Assessment System	163	effect(transformations)	455	enclosure	351	equations(differential)	229
draw while we think	408	dwelling(marketposition)	167	effect(unintended)	174, 368	enclosure(court)	477	equipment	327, 347
draw(analysis of buildings)	117	dwelling(rented)	167	effectiveness	24, 57, 334	end line factory	281	equipment(carrier)	349
drawing	96, 144, 179, 410	DXF-format	49	effects ex ante(perspective)	446	end product(control)	281	equity(social)	494
drawing as you think	411	dynamic	120	effects of the transformations	455	end(block)	116	equivalence	195
drawing board perspective	188	dynamic link	238	effects weighed	446	Endnote	44	equivalent	193
drawing computer programme	210	dynamic properties of the building	330	effects(desirable)	51	end-point	480	ergonomic analysis(stair ascend and descend(simulation))	239
drawing computer programme (vector)	211	dynamic system	225	effects(intended)	51, 149, 446	end-products	367	ergonomics	274, 275, 292
drawing from your memory	389	dynamic visualisation	246	effects(not intended)	149	energy bill	425	ergonomics(computer)	232
drawing in ink	287			effects(undesirable)	51	energy conservation	333	erudition	444
drawing lines(not existing(inventory, image formation))	444			effects(unintended(desired, probable, possible))	446	energy conserving provisions	171	escalators	335
drawing shamelessly	459			effects(unintended)	51	energy consumption	151	Eskimos	399
drawing(autonomous graphic image)	411			effects(welfare)	300	energy consumption for heating	334	Essen	112
drawing(cliché)	173	EAAE Congress	19	efficiency	24, 156, 274, 378	energy for manufacturing	323	essence of the area	429
drawing(context(perspective))	174	each(logic)	193	efficiency(use)	166	energy maximisation	316	essentials of the requirements	459
drawing(contract)	50	Eames	390	effort(attention)	240	energy use	329	established interests	311
drawing(criteria(plans to compare))	173	earlier initiatives	419	effort(attention)	240	energy(nuclear fusion)	495	establishing a hypothesis	255
drawing(diversity)	173	earthbound	20	Egeraat, E. van	364	energy(performance)	333	establishing form	433
drawing(first, small, without scale, 3D, floor plan, cross-section)	466	ease of access	11	Eggink, R.	117	energy(solar)	313, 326	esthétique du miracle	408
drawing(frame)	173	easement	81	EGM	360	energy(sunlight)	495	E-structure(building)	326
drawing(grain)	173	Eastman, C.M.	235	Egypt	204	Engel, H.	103, 417	ethics	48
drawing(information content)	173	east-south-west-north	475	Egyptian Triangle	119	Engelsdorp-Gastelaars, R. van	494	ethologists	215
drawing(intended effect)	174	easy to alter(perception)	241	Eiffel lower	377, 390	engineer	360, 407, 419, 478, 492	Etruscan and Roman priests(ritual)	474
drawing(key-words)	173	eccentric building	361	Eijck, J. van	194	engineer(pragmatic nature)	421	etymology	481
drawing(language(designer))	189	ecclisia	68	Eindhoven	495	engineer(technical)	358	Euclid	183, 203, 204, 216
drawing(outspoken)	173	eclectic spirit(recent or current architecture)	239	Einstein	24	engineering	357, 358	Euclidean geometry	216
drawing(outspokenness)	173	eclecticism	118, 401	Eisenman	379	engineering approach	361	Euclidian space	183
drawing(quotable(documentation))	173	ecocentrism	414	elaboration	289	engineering material	284	Euler	216
drawing(readable effect)	173	ecological approach	313	elaboration(sketches, computer)	287	engineering(collaborative)	379	euphoria	464
drawing(richness)	173	ecological issues	274	elderly people(housing)	310	engineering(concurrent)	379	Europe(continent)	414
drawing(to be decided on)	350	ecological map	314	Eldijk, J. van 263, 287, 387, 419, 423, 429, 459, 465	429, 459, 465	enlarging	73	European continent(entrance(gate-keepers(Dutchmen)))	500
drawing(unity(sense of conviction), bits & pieces(various design ideas))	430	ecological quality	315	electrical energy	336	enquiry	99	European contract	427
drawing(wishes(context(urban architecture), commissioner(interview)))	459	ecological system	495	electrical installations	336	enquiry(designerly)	95, 98	European network	495
drawings	101	ecological concept	437	electrical power supply	336	enquiry(thematic)	485	European orientation	494
drawings in perspective	441	ecology(evolutionary)	256	electricity	330	ensemble	324	European Union(market-situation)	500
drawings(analytical)	130	ecology(opposition(average))	255	electronic catalogues	380	ensemble of buildings	133	European Union(population)	258
drawings(comparison(scale, resolution, legend))	173	economic constraints	151	element	103, 279, 441	ensemble(architectonic)	434	evaluate(decision support systems)	497
drawings(comparison)	173	economic growth	494	elements	370	ensemble(building(realised))	143	evaluating	99, 151, 244
drawings(computer)	477	economic life-span	323	elements(building, main)	345	ensemble(modern)	135	evaluating research ex post	149
drawings(conventional sequence)	237	economic prognoses	251	elements(construction)	113	entering a subway train	392	evaluating(criteria(incomparable, contradictory))	163
drawings(expressionistic)	131	economical context	91	elements(decorative)	113	enterprise	369	evaluating(effect analysis, norms)	173
drawings(geometric)	131	economical life	280	elements(Euclid)	203, 214	enterprise(mission, vision, strategy, tactics, core competence)	373	evaluation	26, 58, 60, 87, 138, 240, 250, 371, 433, 449
drawings(judging)	175	economical scenarios	259	Elements(Euclid)	216	enterprise(motifs)	373	evaluation and decision	371
drawings(kneaded)	462	economical synergy	499	elements(free)	326	enterprise(opportunities)	374	evaluation criteria	163
drawings(line)	231	economics(building)	346	elevation(spirally)	116	enterprise(product)	373	evaluation ex ante	159, 187, 259, 330, 333, 446
drawings(presentation)	290	economics(history)	62	elevations	410	enterprise(usage product)	373	evaluation ex post	155, 160, 187, 267, 330, 334, 446
drawings(reading)	411	economy of means	407	elevator	489	enterprises(small-scale)	358	evaluation ex post(plan analysis)	152
drawings(spatial)	462	edge	441	Elevator Building	419	enthusiasm	396	evaluation matrix	341
drawings(symbolical)	308	edge properties	243	elevator manufacturers	335	entity(parts(entity))(decision making(levels))	280	evaluation methods(misuse)	168
Drenth, P.J.D.	329	edges(graph theory)	216	elevators	335	entrance	116, 289, 468	evaluation of the alternatives	341
Dresdner, A.	70	editorial board	52	Elferink, M.H.	80	entrance into a neighbourhood(estimate depth)	430	evaluation of the design(projecting familiar relationships)	418
Drie Hoven, De	395	education(design)	101	Elling, R.B.	43	entrance level	358	evaluation phase	340
drieklezoor	120	educational context	485	emblem	478	entrance to an area	430	evaluation research	138, 160
driving force	161, 259, 491, 495	educational system	415	emblematic(precedent)	143	entrance to the surroundings	430	evaluation(aesthetic(beauty, originality, complexity, cultural values, symbolic meaning))	152
driving forces(analysing past developments)	161	Eekels, J.	160, 361, 367, 369, 370	embodiment	478	entrance(own)	470	evaluation(all encompassing (exception))	154
driving forces(brain-storm session)	162	Eekhout, A.C.J.M.	37, 263, 279, 283, 328, 332, 339, 355, 357, 362, 443	embracing form	407	entrance(shared(institutes))	467	evaluation(alternatives)	343
driving forces(uncertainties(critical))	162	EEM	378	embracing(exhibition)	461	entrances(identify)	392	evaluation(analytical)	143
driving forces(workshop)	162	Eemerens, F.H. van	191	E-modulus	285	envelop(minimum)	107	evaluation(building in use)	328
Droge Magazijn(1911, NNM)	460	Eesterens, C. van	434	emotional side of designing	421	Environment & Planning Ed. B	249	evaluation(contexts(perspectives))	159
Droysen, J.G.	64	effect	329, 445	emotional well-being	95	environment differentiation	441	evaluation(demand(supply))	152
DRS	19	effect analysis	28, 87, 171, 187, 259, 456	emphasis(shift)	390	environment(built)	95	evaluation(design(integrated, mono))	161
drum residences	115	effect analysis(circular reasoning)	174	empirical	102	environment(material)	370	evaluation(design(multi-functionality, monofunctionality))	161
drums	115	effect analysis(combination of design interventions)	174	empirical concept	190	environment(trihedral)	235	evaluation(design(problems in urban areas))	161
Drunen, H.A. van	372	effect analysis(list of effects)	175	empirical cycle	138, 179, 250, 253, 254, 330, 415	Environmental Control Act	84	evaluation(design(public, private))	161
dry skin	327	effect analysis(plan, drawing)	174	empirical cycle(logic)	200	environmental design	146	evaluation(design(synergy(local), isolated projects))	161
drying out	315	effect analysis(drawings(comparable (legend)))	174	empirical experiment	414	environmental differentiation	433, 439	evaluation(design(use(mixed ground, alternating, one sided))	161
DSS	160, 378	effect analysis(drawings(summary of the differences))	174	empirical induction	199	environmental impact analysis	159	evaluation(economic(investment costs, exploitation costs, legislation))	152
dual branches	217	effect analysis(weight(suffering objects))	174	empirical method(problems)	448	environmental maintenance	274	evaluation(environment(housing))	164
dual map	217	effect of a particular design method	329	empirical model	417	environmental maximisation method	313	evaluation(focus)	160
dual nodes	217	effect per suffering object	174	empirical research	138, 141, 145, 416	environmental ordering	84	evaluation(format)	141
dual(brick wall)	281	effect report	174	empirical researcher	447	environmental prognoses	251	evaluation(functional(accessibility, efficiency, health, safety, spatial orientation,	
Duchamps, M.	392	effect(actual)	159	empirical sciences(models(descriptive, explicative, predictive))	185	environmental requirements	323		
ducts	325, 347	effect(design intervention)	159	empirical sciences(technology)	307	environmental sustainability	494		
ducts for cables	337	effect(focus)	446	empirical study(evaluation(ex post))	187	EOR	197		
Duffy, F.	98, 99	effect(intended(intention, goal formulation, design criteria, design programme))	174	empirical study(statistics, inquiries, interviews, observations, models(gravity))(programming research)	267	epidemiological study(questionnaire, building checklist, measurement protocol)	328		
Duijvestein, I	184	effect(intended)	187	empiricism	414, 416, 418	epistemological limits	448		
Duijvestein, K.	263, 313, 439			empiricism(logical)	414	epistemology	413		
Duiker, J.	117			empiricist thinking	414				
Duin	57, 89, 90, 152, 212, 275								
Duncan, F.	434								
dunes(ridges)	132								
duplex house	164								
durability	20, 95, 108								
durable goods	268								



territoriality, flexibility, thermal comfort))	152	existing construction	420	external stimuli	413	final market investigation	283	focused	294
evaluation(future actors)	160	existing examples(design research)	443	extrapolate(research/design document based))	144	final notes	43	focused on the final result	311
evaluation(heating(housing))	164	existing opportunities	430	extrapolated	162	final plan(performance checks)	163	Fokink	215
evaluation(integration(parts of the design))	160	existing situation	441	extrapolated(ceteris paribus)	204	financial feasibility(amenities)	267	folded surface	379
evaluation(kitchen(housing))	164	exogenous starting point	418	extreme scenarios	162, 259	financing(plans)	374	folly	67
evaluation(levels(site, building, rooms))	152	exogenous variables	225, 255, 260	extreme value	207	find	28	foot	348
evaluation(object, project, location, processes, values)	160	expectation	411	Eyck, A. van	89, 103, 419	Findeisen, W.	251, 254	foot(Amsterdam)	122
evaluation(objectives(means))	152	expectation(variables(dependency))	447	eye(focus)	399	fin-de-siècle	96	footbridge	483
evaluation(out-of-date(housing))	164	expectations(not explicit as a requirement)	331	eye-level transparency	392	finding formulae	228	footings	342
evaluation(perception)	241	expected to be significant	159			finding new concepts	392	foot-notes	43
evaluation(performance)	163	expected(within classes)	220	<b>F</b>		finding oppositions	459	Foqué, R.	297, 298, 339, 340, 438
evaluation(perspectives, projects)	497	experience and experiment	404	fabric	440	finding the new	390	force(driving)	491
evaluation(positive and negative aspects)	160	experience(aims)	404	fabric(urban)	474	finding your way	274	forces(internal)	280
evaluation(post occupancy)	58, 163, 328, 334	experience(beyond spoken language)	438	fabricated	367	finishing	347	forces(localised)	286
evaluation(post-project)	334	experience(experience)	403	façade	121, 332, 341, 347, 354, 455, 468	finishing constructions	331	forces(vertical)	286
evaluation(private space outside(housing))	164	experience(generating)	416	façade articulation	425	finishing of the spaces	372	forecasting	253
evaluation(product orientated)	154	experience(new(foregoing))	403	façade beams(monolith concrete)	325	finishings	332	forecasting study	253
evaluation(quality criteria)	160	experience(physical)	478	façade cleaning installation	337	finite resources	300	foreground and background	414
evaluation(representations(design))	238	experience(place)	441	façade panel	346	Finley growing Museum of Life-spans	477	foresight	100
evaluation(results(non transparent, simple, questionable, undifferentiated))	163	experience(prior(perception))	240	façade skin(second)	323	Finnegan, M.J.	328	foreword	43
evaluation(sanitary equipment (housing))	164	experience(unconscious)	401	façade systems	347	fire safety	274	form	20, 87, 92, 93, 100, 292, 345, 443, 483, 492
evaluation(scenarios)	161	experience, habituation and finally routine	403	façade twisted, flat)	325	fire security	324	→ shape	
evaluation(selection)	141	experiences(foregoing)	403	façade(weight carrying)	169	firmilas	95	form and function(dichotomy)	240
evaluation(service flat costs (housing))	164	experiencing	94	façade	426	firms	269	form as an answer	401
evaluation(solutions(innovative))	154	experiencing aesthetics	367	façade	426	first choice	473	form concept	94, 436, 439
evaluation(stakeholders)	179	experiencing(spatial)	367	façade	426	first idea	436	form concept(consistent package of design ideas(main structure))	433
evaluation(statement)	154	experiencing(wishes and the existing(staying a weekend))	466	façade	426	first idea(rejecting, embroidering further)	459	form concept(methodological tool)	440
evaluation(surface(housing))	164	experiential transition(history)	64	façade	426	first input	256	form concept(situation, translation(programme))	433
evaluation(technical(lighting, acoustics, fire safety, building physics, sustainability))	152	experiential value	455	façade	426	first line investigations	327	form convention	292
evaluation(themes)	149, 154	experiential(concept)	437	façade	426	first step	473	form expression(artistic)	379
evaluation(thermal isolation(housing))	164	experiment	100, 403	façade	426	fish without knowledge of the water	387	form finding	379
evaluation(type of domicile(housing))	164	experiment and experience	404	façade	426	fit	12, 212	form follows function	107, 109
evaluation(typology(form variants))	155	experiment(aims)	404	façade	426	fit the task	406	form idea	292
evaluation(typology(form variants))	155	experiment(details)	421	façade	426	fitness(potential)	403	form of the building(programme of requirements, personal preferences, contextual aspects, flexibility(changing functions))	277
evaluation(weighing of the arguments)	160	experiment(mental)	145	façade	426	fitting(partioned(segments))	290	form of the building(study(context(urban architecture)))	424
evaluative study	277	experiment(thought)	101, 183	façade	426	five points(Corbusier)	108	form studies	102, 142, 483
evaluative study ex post	149	experimental design(research)	364	façade	426	fixed data	300	form type	104, 106
Evans, G.	245	experimental simulated working environment	142	façade	426	fixed pattern	235	form variants(peripheral, compact) (one-storey, two-storey)	169
Evans, R.	231, 232, 245	experimental study	481	façade	426	fixed ratio(m <sup>2</sup> shopping space(inhabitants))	266	form vocabulary	380
event	207, 209	experimental testing	165, 166	façade	426	fixed structure	300	Form Studies Staff	483
event(partial)	219	experimentation(aimless)	416	façade	426	fixing the conditions	411	form(add)	104
event(possibilities(number))	210	experimenting	25	façade	426	flanges	394	form(all-embracing)	407
event(probability)	219	expert opinion	239	façade	426	flashes of inspiration	389	form(city)	125, 126
everyday object	392	expert system	329, 382	façade	426	flavour(extra)	282	form(construction)	396
evidence(circumstantial)	137	expert(DSS)	378	façade	426	flexibility	20, 273, 274, 276, 353, 367, 378	form(curved)	430
evolutionary algorithms	382	expertise	378	façade	426	flexibility in allocating functions	292	form(form)	93
evolutionary ecology	256	expertise(design)	145	façade	426	flexibility(functional)	368	form(function)	107, 109, 292
ex ante	149, 151, 159	expertise(programming phase)	151	façade	426	flexible	368	form(generating factors)	430
ex ante activity	286	experts	293	façade	426	flexible(function or use)	330	form(geometrical)	370
ex ante analysis of effects	446	explanation	53	façade	426	Flier, C.L. van der	167	form(geometry, nature)	108
ex ante research	159	explanatory complaint	327	façade	426	flight simulator scenery	51	form(ideas)	96
ex ante evaluation	259, 330, 333, 446	explanatory(self)	408	façade	426	floating box(concept(column form(pencil)))	463	form(intersect)	104
ex post	149, 151, 159, 174	ex-plate	217	façade	426	floor	341, 347, 487	form(material)	57
ex post research	160	explicative model	184	façade	426	floor construction	343	form(meaning)	396
ex post(analysis)	276	explicit	254	façade	426	floor load bearing	274	form(optimum)	297
ex post(evaluation)	160, 267, 330, 446	explicit and expressive description	173	façade	426	floor plan	116, 120, 287, 289, 410, 465	form(particular)	429
examination	19	explicit method	369	façade	426	floor plan(description)	233	form(physical-chemical)	370
examples(architectural)	387	explicit method	339	façade	426	floor plan(drawing)	426	form(possible)	208
Excel	44, 54, 203	explicitly formulated	362	façade	426	floor plan(foundation)	353	form(state of dispersion)	189
exception(façade(protruding box))	426	exploration	100, 455	façade	426	floor resting on foundation	353	form(subtract)	104
exchange(ideas)	311	exploration by design	493, 500	façade	426	floor space	269, 270	form(unsatisfactory(perception))	241
exchange(information)	379	exploration sketch	429	façade	426	floor surface	275	form(variety)	310
exchanged	338	exploration(design(formal))	493	façade	426	floor(additional)	325	form(without dimensions)	216
exclusive	438	explorative model	185, 186	façade	426	floor(covering)(additional)	427	formal	418
exclusive concepts	39	explorative research	141	façade	426	floorplan analysis(comparative)	155	→ morphological	
execution	58	explorative research(questions(what, how, why))	138	façade	426	floor-plan analysis(comparative)	277	formal acceptability	241
execution model	184	explorative scenario	184	façade	426	floors(concrete)(interleaving)	427	formal aspects(history)	63
execution phase	340	explorative study	53, 138	façade	426	floors(raised)	332	formal coherence	430
execution(history)	65	explorative(designerly inquiry)	137	façade	426	floors(rising)	325	formal composition	492
execution(potential)	438	explorative(explorative)	145	façade	426	floor-space-index	270	formal design	493
exemption(zoning plans)	81	exploratory-research	89	façade	426	flora(maximisation)	315	formal design process	387
exercise(design)	492	explore(search(combinations(situation, activity patterns)))	492	façade	426	Floriade	364	formal grouping	243
exhaustion(stage)	369	exploring scenarios	259	façade	426	flow from the entrance	335	formal language	421
exhibition	461, 473	exploring study	53	façade	426	flow(graph theory)	218	formal logic	179
exhibition building	464	exploring the field	411	façade	426	flow-chart(activities)	277	formal logical model	189
exhibition concept	462	exponential function	256	façade	426	flowing movement	395	formal ordering	433, 436, 438
exhibition regimen(furniture)	477	exposition format	144	façade	426	fluid architecture	364	formal relations	492
exhibition space	464, 467	exposition space	470	façade	426	fluid dynamics(computational)	334	formal system(architectural)	240
exhibition(concept)	473	express	35	façade	426	fluorescent lamps	336	formal themes	95
exhibition(lower)	461	express their elements	95	façade	426	focus	35, 36, 42, 139, 408, 409, 444	formalising	128
existence(spiritual)	491	expression(mass)	468	façade	426	focus of interest	409	formalism	94
existence-quantor	193	expressionism	418	façade	426	focus of programming research	266	format	141
existing building	321	expressionistic drawings	131	façade	426	focus of research	496	format(exposition)	144
existing characteristics of the area	438	extending a building(adding parts)	424	façade	426	focus on straight applications	358	formation images	387
		extension	40	façade	426	focus(component, node)	345	formation of a goal	416
		extension(examples)	91	façade	426	figure ground analysis	126	formation of concepts	415
		extension(object)	206	façade	426	fill in the gap	144	formation of the image	413, 443
		exterior	368	façade	426	filming	246	formative factor	327
		external loads	331	façade	426	final design	338, 372	forming of spaces	348
		external requirements	273	façade	426				

forming(ordering)	429	function	20, 40, 104, 225, 345, 440, 441	functions(concentrating)	324	geographical co-ordinates	51	government(charge of certainty, safety and continuity)	493
forms and colours(context)	394	Function	92	functions(control)	229	Geographical Information System	182	government(planning institutes)	497
forms and meanings(pull apart)	396	function analysis	275, 276, 371	functions(uncertain)	27	geography	53	Graaf, R.P. de	203, 301
forms of ordering	474	function and construction(idea)	408	function-segregation <sub>3m</sub>	106	geometric drawings	131	Graafland, A.D.	249
forms(archetypal)	487	function binding	105	fundamental study	356	geometric interpretation(spatial constraints)	236	grachtengordel	121, 434
forms(complex)	379	function co-domain	225	furniture	274, 394	geometric primitives	233	grachtenhuis	119
forms(continuous language)	326	function combination	105, 106	furniture(sub-system)	280	geometric tools(intuitive)	232	gradient	93
forms(generating)	378	function depiction	225	future conditions	491	geometric transformations	234	graduation	21
forms(possible)	20	function divisions	104	future contexts	251	geometric types	104	Grafe, C.	109
forms(proto)	406	function image	225	future demands	378	geometrical concept	190	graffiti	170
formula(iterating)	256	function integration	91, 106	future developments(beyond the government's control)	162	geometrical form	370	grain	37, 50, 55, 174
formula(repeating)	403	function integration <sub>10cm</sub>	106	future situation	491	geometrical series	213	grain of time	201
formula(stair sizes)	239	function integration <sub>3m</sub>	106	future use of the building	378	geometrical shape	487	grain silo	419
formulae(finding)	228	function mats	166	future(aims, means)	492	geometry	203, 209	grain(drawing)	211
formulated(explicitly)	362	function of the product	370	future(art, rules, people, recreation(potential))	491	geo-metry	215	grain(focus)	42
formulating building technological problems	382	function outcome	225	future(desirable)	253, 254	geometry and architecture	232	grain(here, now)	201
formulating the problem	251	function output	225	future(image(prognosis, design, scenario))	258	geometry(Berlage)	119	grain(model)	186
formulation(problem)	254	function range	225	future(potential)	492	geometry(combinatorial)	215	grammar(verbs of modality)	189
Forster, K.W.	379, 382	function segregation	106	future(probable)	51, 446	geometry(correctness)	359	grand café	465
Fortgens, A.Ch.	79	function segregation <sub>10cm</sub>	106	future(uncertain)	161	geometry(descriptive)	215	grand figure	123
Fortier, B.	125, 129	function segregation <sub>30cm</sub>	105	future(virtual reality)	491	geometry(Euclidian)	216	Grand narratives	414
forum	126	function separation	105, 106	future(way of prediction(alpha, betha, gamma, delta))	491	geometry(sizeless)	216	granular size	350
Fosso, M.	145	function separation <sub>3cm</sub>	105	futures(desirable)	492	geometry(states of dispersion(continuous))	215	granulated concrete	427
Foster, N.	364	function separation <sub>3m</sub>	105	futures(necessary)	492	geo-morphological stratum	131	graph	216
Foucault, M.	414	function square	225	futures(probable(research))	492	geons(basic components)	235	graph theory	209, 216
foundation	120, 341, 350	function structure	370	futures(sorts)	492	geons(cones)	243	graph(circuit)	217
Foundation Analysis of Buildings	117	function theory	207	fuzzy engineering agent	382	geons(decomposition)	243	graph(complete)	217
Foundation Architectural Museum	494	function type	104	fuzzy logic	194, 377, 382	George, P.	104	graph(contractd)	218
Foundation for Architectural Research	347	function value field	225	G.W.L. area	439	Gero, J.	299	graph(directed)	217
Foundation NNAO	494	function(argument)	225	GAA	122	Gesamtkunstwerk	477	graph(isomorph)	217
foundation(laying)	280	function(building)	330, 341	Gaas, De	315	Gestalt principles	241	graph(n-conjunctive)	218
foundation(pile)	342	function(chaos(first input))	256	Gadamer, H.G.	67	Gestalt psychologists	241	graph(non-conjunctive)	218
founding	474	function(chaos)	256, 257	Galbraith, F.D.	169	Gestalt(history)	65	graph(planar)	217
four P's	369	function(declarative(everyday language))	205	Gallei, G.	183	Gestaltung	119	graph(planes)	217
four-dimensional	475	function(derived)	227, 228	galleries(access)	392	gestures(conspectio)	475	graph(regular)	217
fractal forms	203	function(differentiation)	225	game	102	Gestalt(environment)	126, 132	graphic representation	411
fractal(Cantor)	226	function(discontinuous)	227	game of creation	474	Geurtsen, R.	387, 419	graphical interlaces	232
fractal(Julia)	226	function(domain)	225	game(arcade)	232	Geuze, A.	244	graphs(single)	217
fractal(Mandelbrot)	226	function(exponential)	256	game(closed form)	479	Gibson, J.J.	244	Grashof(non-dimensional number)	329
fractal(meander)	226	function(flexibility in allocating)	292	game(internal logic)	476	Gibsonian perception	244	gratings(perception)	240
fractal(Sierpinski)	226	function(form)	92, 93, 292	game(rule)	474	Giedion	69	gravitation model	269
fractal(turning curves)	226	function(growth(population))	256	game(rules, constraints, formats)	142	Giesen-de Noord	342	gravity(models)	267
fractal(twists)	226	function(independent variable)	225	game-like situations(design activity driven research)	140	GIS	76	Greater London City Council	364
fractals(ising(image))	226	function(input)	225	games(video)	232	GIS(model(spatial))	182	Greek colonies	203
fractals	225	function(integration)	225	gamma sciences	379	glass 'louvre' beams	356	Greek philosophy	478
fractals(tree)	226	function(iterating)	256	gamma way(social science)	491	glass box design	286	Greeks	96, 475
fraction	207	function(Lotka-Volterra)	257	gap(fill in(research(design document based)))	144	glass column	366	Green Heart	36, 182, 495
fracture behaviour	285	function(mixing)	324	garden(collective)	135	glass construction	286	Green Heart(scale confusion(Central Park))	188
fragmentising	128	function(operationalisation(full-sentence function))	192	Gastelaars	494	glass line	325	green space	315
frame	37, 50, 174, 441	function(original)	225	gate	423, 430, 481	glass line(bottom)	325	greenhouse problem	365
frame and grain	387	function(rating growth)	225	gate function	425	glass spaces	331	greying of the population	310
frame based representation	237	function(separation)	324	Gauchel, J.	234	glass surface	490	grid	122, 237, 418
frame of reference	396, 399, 403	function(steering)	225	Gaudí, A.	117, 123, 124, 415	glass(pre-stressed(strength, E-modulus, polymers))	285	grid lines(co-incide boundaries)	123
frame(computer programming)	234	function(structure)	92, 93	Gaussian curve	219	glass(warm bent twisted)	490	grid lines(intersection)	473
frame(drawing)	211	function(usage)	94	Gauss-Jordan method	222	Glass, L.	434	grid(begin to design)	418
frame(focus)	42	function(value)	225	Geels, F.	260	glasshouse(storing, exhibiting)	460	grid(Cartesian)	359
frame-less doubly glassed panes	356	function(variables)	189	Geerts, G.	437	glazing percentage	332	grid(size system)	212
frameless glazing	284	function(working)	204	Gehry, F.	94, 291, 364, 379, 380	glazing(frameless)	284	grid(structure(monument))	463
framing system	490	functional analyses(norms)	239	Gelder(nodal bond)	286	glazing(tinted)	331	grids(rigid use)	122
Frampton, K.	396	functional analysis	92, 275	Gemeente Rotterdam	270	global to detail	237	Grinten, E. F. van der	61
Frankendael	439	functional analysis	275	Gendt, A. van	122	glue connection(chemical)	356	Groningen(East)	495
Frank, P.	57, 92	functional designing	275	general assertion(set restriction)	193	glueing	356	Groot, A.D. de	54, 249, 253, 415
Frazier, W.	169	functional flexibility	368	general contracting	272	go / no go decision	374	Groolendorst, R.	191
free agents	491	functional goal	330	general effect(case)	83	goal	38, 413	Gross, M.D.	102, 238
free data	300	functional hierarchy(shopping centres)	268	general effect(cases)	34	goal orientated study	173	ground exploitation(high rents)	267
free elements	326	functional life-span	323	general(ruling/cases)	191	goal functional	330	ground floor	120
free the task	406	functional ordering	433, 438	general to particular	447	ground floor construction	342	ground of comparison	91
freed and interpretable	395	functional organisation	434	generalisation	252, 416	ground plan	434	ground plans	123
Freedman, R.	235	functional planning	434, 436	generalisation(abduction)	199	ground water level	315	groundplan	434
freedom of choice	253, 500	functional planning(allocation functions)	433	generalisation(testing(hypotheses))	179	ground-space-index	270	group(collection of materials)	351
freedom(concrete)	474	functional potentials	93	generalisation(uniqeness)	252	group(interest)	492	grouped(design cases)	144
freedom(design)	210	functional preferences(translation)	163	generalisations	255	grouping	244	growing stage	369
freedom(human)	491	functional quality	158	generalise	12, 54	growing organically	368	growth function	256
freedom(restriction(experience))	403	functional requirements	274, 275, 336	generalising	54	growth of knowledge	179	growth(economic)	494
free-standing	394	functional requirements of a building	330	generate	12	growth(exogenous contamination)	418	growth(limits)	229
Frege, G.	205, 206	functional significance	392	generates	443	guarantee(life-span)	356	Guggenheim Museum	380
Frey, G.	182	functional unit system	170	generating	54	Guggenheim Museum(Bilbao)	364	guiding idea	406
Frieden, B.J.	455	functional(concept)	437	generating experience	416	guiding motive	467	Gunsteren, L.A. van	293, 299
Frieling, D.H.	21, 89, 454, 491, 492	functional(mono, oligo)	367	generating forms	378	gutter level	124	Guyt, P.	263, 265, 268, 269, 270
Friend, J.K.	298	functional(theatrical)	421	generations	256	Guzmán, A.	235	gymnastics	415
Frijlink, F.	181	functionalism	92, 94, 107	genesis(slow, nature, Berlage)	119				
from a distance	413	functionalist	292	genetic algorithms	377, 382				
from scratch(project)	145	functionalist urbanism	434	genetic mutation	416				
from up-close	413	functionalistic design(criticism)	125	genius loci(context liberating (object))	493				
front	287	functionality	483	Genua	112				
front(colour and texture)	289	functionality(emphasis)	310	geodesy	71				
front-right-behind-left	475	functional-technical segment	433						
Frost	473	functioning and fitting	468						
fuelling station	268, 269	functions and performances	273						
full-scale mock-up	275, 456	functions(additional)	288						
full-sentence	190	functions(CIAM(housing, employment, amenities, traffic))	266						
full-sentence function	192, 225								
full-sentence function(design act)	192								
funcitie(vorm)	94								

## G

	high buildings	335	humanism	415	building)))	470	in- and output(building)	468
	high density land	498	humanities	100	identity(scholarly)	369	in situ	96, 276
	high speed railway connection(circle line)	495	Hume, D.	295, 414, 418	identity(water system)	500	inaugurating	474
Haarlem	134	high speed transport	Husserl, E.	414	ideogram(3D, concept)	406	in-between	446
Haartsen, J.	346	high tech	Huttinga, E.	374	ideological bias	430	in-between realm	97
Habermas, J.	305	high-rise	HVAC	329	ideology	92, 291	inception phase	377
habit(traditional)	281	high-rise building	HVAC installations	331	if	194	incident branche	217
habitation history	59	high-rise tordo	hybrid	435	if ... then... else(programming language)	229	inciding branche	217
habits(ingrained)	390	Hildebrandt, S.	hypermedia	238	if p then q	195, 204, 369	inclination	227
Habraken, N.J.	102, 280, 347	Hillenius, D.	hyperparabolo)d	488	if x then y(forecasting study)	253	inclination to move	158
Haes, U. de	39	Hillier, F.S.	hyphen	47	if... then... statements(choice of parameters)	258	inclusive concepts	39
Hagget, P.	181, 183	hindrance(noise)	hypotheses(formulate)	138	if... then... function(programming language)	229	incomparable categories	27
Hagia Sofia	396	hinged nodal bond	hypothesis	12, 29, 53, 87, 138, 145, 179, 250, 254, 255, 409, 414	if... then... (command)	197	incomplete idea	416
Hague, The	112, 132, 291, 355, 467	Hinse, T.	hypothesis(design)	87, 255	iff	195, 196	incomplete induction	199
half-truth	201	historians(typewise to a particular period)	hypothesis(designed)	21	if-statement	227	incomplete knowledge	294
hall	124	historic precedents	hypothesis(establishing)	87, 255	igloo's	110	incomplete syllogism	200
hall offices	288	historical co-occurrence	hypothesis(forming)	192	IJ square	114, 116	increased demands	309
hall theatre	470	historical development	hypothesis(model)	21	IJburg	188, 310, 435	increasing validation	205
hall(central)	470	historical distancing	hypothesis(working)	142	IJssel	134	incremental results	285
hall(factory)	470	historical situation	hypothesis-forming	328	IJssel, S	447	independent variable	48
Hall, E.T.	399	history			illuminate	335	independently(live)	310
hallucinations	413	history of architecture			illustrations	12	Indesem	397
Hamel, R.	58, 59	history of exploitation			illustrator 2	245	indeterminacy	432
handcrafted artefacts	400	history of the location(analysis of buildings)			imag(in)ing study	142	indeterminacy in the design	470
handicap	311	history(reception)			image	35, 45, 46, 57, 94, 291, 294	indeterminate(leaving)	427
handling capacity	335	history(science concept)			→ picture		index	12, 35, 45, 46
handwriting	470	history(social science)			image archive	49, 50	index number	205
Hanks, P.	280	history(type driven)			image characteristics	173	index numbers(planning)	266
Hanwell, J.D.	186	Hobbes			image expectations	273	indexing	381
harbour	60, 433	Hobma and Schutte			image formation	78, 444	indexing schemes(retrieval whole designs)	238
Häring, H.	94	Hobma, F.A.M.			image forming	187	indexnumbers(parking)	266
harmony	95, 119, 240	Hochberg, J.E.			image of the city	439	individual aesthetic	394
harmony(perception)	241	Hoeven, C. van der			image qualities	93	individual cases	220
Harrison, G.A.	415	Hoffman, D.D.			image type(architecture)	106	individual choice models	269
Harrison, Weiner, Tanner and Barnicot	415	Hofstee, E.W.			image type(landscape architecture)	106	individual design based research	140
Hartog, J.P. den	334	Hoge Veluwe			image agreements, conventions, tunings)	182	Individual design based research	143
Hartog, P. den	351	Hole in the wall			image(archive)	29	individual maximisations	316
Harvey, D.	183	holes(quadratic)			image(formation)	387, 413	individual pursuit	296
Haslinghuis, E.J.	35	holistic associative structures			image(initially fragmentary)	409	individual strategy	497
Haveneiland	188	holistic utopia			image(model(conceptual(spatial)))	183	individual(freedom, responsibility)	491
Hawkins, D.J.B.	195	Holl, S.			image(problem)	294	individualisation	307, 309
Hawthorne experiment	414	home care			image(urban)	434, 441	indoor air	330
He, Z.	244	home care zones			image(water system)	500	indoor climate	330
head of a bull	393	home(convalescent)			images(alternating)	49	induction	34, 199, 200, 250
headaches	327	homo economicus			images(collection)	402	induction process(psychological)	250
headers and courses	119	homo ludens			images(designing(affinity))	28	induction(complete)	191
headings	46	homo sociologicus			images(information)	182	induction(empirical)	199
heads	120	homogeneity			images(old)	390	induction(incomplete)	199
heads and layers	348	homogeneity(perception)			images(reference)	133	inductive	191
health care	169	homogenous design theme			images(sequence)	246, 441	inductive reasoning	400, 406
health centre	155, 169, 277	Hoogdalem, H. van			images(vague)	173	industrial area	433
Health Centre Merenwijk, Leiden	154	horeca law			imaginable(combinatorics)	208	industrial areas	269
health centres(accommodation policy)	277	horizontal distribution			imagination	106, 109, 254, 402	industrial building	346
health system(public)	169	horizontal pipes			imagination techniques	106	industrial building(load-bearing construction)	342
healthy building	330, 338	horizontal space			imagination(area in between(body, mind))	478	industrial design engineering	369
heat accumulating mass	332	horizontal surfaces			imagination(not the case)	190	industrial designers	391
heat load	332	horizontal surfaces(locomotion)			imaginative insights	100	industrial location	433
health land	315	horizontal(perception)			imaginative power(organising)	411	industrial product	367
heating	329	Horssen, W.T. van			imagine	415, 477	industrialisation	234, 281
heating capacity	334	Heerde, R.			imagined	35	industrially fabricated standard building components	359
heating(district)	313	Heeling, J.			imagining	483	inequalities(arithmetic)	223
Hedge	328	Heeregracht			imagining imagination EAEA	142	infectiousness	284
Hedicke, R.	63	Hegel			imagining process	97	infill and contents	391
Heeling, J.	387, 429, 433, 436, 439	Heide, H. ter			imagining process(channelling inspiration)	96	infill(changeable)	405
Heeregracht	121	Heidegger, M.			imagination	96	infill(support)	347
Hegel	414	height of the rooms			imaging(architectonic)	133	infinite space	475
Heide, H. ter	159	height(building)			imaging(creative)	96	Infinitely growing Museum of Life-spans	477
Heidegger, M.	414	height(least structural)			imagining stage	309	infinitesimal calculation	205
height of the rooms	470	Heijer, A.C. den			imagining free exchange(agents))	308	influencing(transformation)	401
height(building)	121	Heisenberg			IMAGO	313	information acquisition	382
height(least structural)	407	Hejduk, J.			imitate	113	information and communication technology	377
Heijer, A.C. den	161	helixes			imitation(history)	66	information handling	382
Heisenberg	414	helix-wise(process)			immeasurable characteristic	92	information processing	378
Hejduk, J.	474	Hemenway, K.			immediacy	316	information technology	231
helixes	226	hence			impact analysis(environmental)	159	information theory(perception)	241
helix-wise(process)	369	Henket, H.A.J.			impact colleagues	464	information theory(structural)	242
Hemenway, K.	235	Hercher			impact(levels)	495	information(theory design process)	163
hence	201	Hersey, G.			impedes a creative solution	449	information(discipline bound)	396
Henket, H.A.J.	98	Hertzberger, H.			implementation phase	340	information(economic and technological developments)	307
Hercher	105	395, 399, 402, 407, 409, 411, 457			implementation process	151	information(history, elementary)	62
Hersey, G.	235	heterogeneity			implementation strategy(computerised representation)	237	information(overwhelming)	382
Hertzberger, H.	100, 140, 361, 387, 389, 395, 399, 402, 407, 409, 411, 457	heterogeneous mixture			implementations(alternative)	233	information(technology)	231
heterogeneity	391, 418	heuristic model			implication	195	information(visual)	231
heterogeneous mixture	105	heuristic search methods			implicit conditions	254	informative stage	128
heuristic model	184	heuristics			imponderabilia	54	infrastructural elements	129
heuristic search methods	382	hiatuses			impressionism	416, 418	infrastructure	71
heuristics	61	hidden burdens			improbable possible	339	infrastructure construction	280
hiatuses	132	hierarchical structure			improbable(conditions)	259	infrastructure design	279
hidden burdens	162	hierarchy			improvement	321	ING-bank	498
hierarchical structure	371	hierarchy of construction(infrastructure, building, component, element)			improvising creativity	481	ingenuity	389, 390
hierarchy	268	hierarchy(control)			impulse	294	ingrained habits	390
hierarchy of construction(infrastructure, building, component, element)	279	hierarchy(functional)						
hierarchy(control)	380							
hierarchy(functional)	268							

ingredients	409, 417	intentions(building(involved parties))	151	introspective	55	judge	80	KPN building	360
Inhelder	413	intentions(design)	144	intuition	87, 89, 291, 294, 339, 401, 470	judge(supreme)	82	Krampen, M.	95
initial building costs	167	intentions(perceiving)	399	intuition nourished by experience	357	judgement(forming)	309	Kranenburg	286
initial term(arithmetical series)	212	Interactief Beeld Archief	28	intuition(insight, vision)	478	judgement(selective, implicit)	160	Krauthheimer, R.	67
initial value	228	inter-action	493	intuition(subconsciously)	478	judgement(shaping)	308	Kriens, I.	160
initiating and sustaining power (agents)	309	inter-action disciplines	340	intuitive	362, 419	judgements	96	Kristinsson, J.	323
initiators(workshop project)	141	inter-action of design and research	151	intuitive appreciation(aesthetic preference)	239	judgements(synthetic)	204	Kroes, P.A.	22
inner court	170	interactive manipulation(computerised representation)	239	intuitive decisions	356	judging designs	159	Kröling, P.	328
inner spaces	170	interactive visualisations	378	intuitive geometric tools	232	judging(comparable plans)	175	Kröllér Müller Museum	110
inner-partitioning	347	interconnection	350	intuitive method	339	judging(comparison)	175	Kronhout	119, 120
innoduction	199	interconnection(route(hinterland), water-front)	134	intuitive perception	237	judging(drawings)	175	Kroonenberg, van den	370
innoduction(negation)	199	interconnections(amount)	33	intuitive process	292	judging(evaluating)	173	Kruft, H.W.	62
innoduction(reasoning)	369	inter-dependence(spatial)	440	inventing	360, 479	judicial system(continentaI)	82	Kruijter, G.	214
innovative	96	interest	401	invention	28	Julia(fractal)	226	Kruythoff, H.M.	53, 57
innovative solutions	154	interest groups	492	invention of electrical power	416	jurisprudence	34, 83	Kuala Lumpur	380
innovative solutions(finding oppositions)	459	interest(conflicts)	303	inventiveness	297, 392	Just in Time Delivery	350	Kuhn, T.S.	22
input	48	interest(estabIished)	311	inventor	492	Juul	473	Kuijper, J.	359
inquiries	267	interface	347, 350, 414	inventory	53	juxtaposed(design cases)	144	Kurmann, D.	382
inquiries(consumer, visitor, retailer)	269	interface with the builders	464	inventory of wants(probable)	417	juxtaposition	102, 214	Kurokawa, K.	95
inquiry	19	interface with the constructor	464	(desirable))	444			Kurvers, S.R.	327, 334
→ research, investigation, survey, study		interface(description)	351	inventory(concept, type)	444			Kuypers, G.	19
inquiry(quick and dirty)	155	interfaces(graphical)	232	inventory(context)	443	<b>K</b>		<b>L</b>	
inside and outside	413	interim results	417	inventory(taking)	443	K 3,3(graph)	217	Laan, Dom van der	214
inside(graph theory)	217	interim variants	418	inverse matrix	222	K10(graph)	218	Laar, J. van de	483
inside(scale dependent)	190	interior	368	investigation	19	K4(graph)	217	label(symbolic(grouping(sub-system)))	233
inspection	337	interleaving concrete floors	427	→ research, inquiry, survey, study		K5(graph)	217	laboratories	101, 102, 324, 423
inspiration	467	interlocking of the components	350	investigation(final market)	283	Kahn, L.	185	laboratory tests	497
inspiration without perspiration	417	intermediate design data	143	investigations(final line)	327	Kamerling, J.W.	339, 342	laboratory(design)	485
inspiration(deadline)	291	internal capability	374	investigations(mock-up)	333	Kan, L. van	263, 287, 387, 419, 423, 429, 459, 465	labour conditions	359
inspiration(design)	291	internal conditions	273	investigations(preliminary)	138	Kanizsa, G.	21, 26, 204, 414	labour(priorities)	496
inspiration(environment)	291	internal forces	280	investigators(second line)	327	Kant, I.	21, 26, 204, 414	labyrinth	103, 476
inspiration(flashes)	389	internal loads	331	investment costs	167	Kant's categories	414	labyrinth diagram	477
installation component	333	internal partitions(sub-system)	280	investment priorities	496	Kapteijns, J.H.M.	351, 353	labyrinth diagram(constructing)	481
installation design(progress of the design)	332	internal relations	353	investment strategy	495	Karlskirche	68	labyrinth pattern	481
installation designers	338	internalisation(model, external factors)	258	iron(cast)	377	Kasteren, J. van	181, 187	labyrinth(Cretan type)	476
installation designers(problems(warning, solving))	338	internalising(perception)	231	is(ambiguity)	193	Kalendrecht	419	lack of knowledge	294
installation providers	338	international congresses	330	ISBN	45	Kallenbroek	435, 439	ladders	337
installation(design)	333	international connections	494	islands	131	Kaufmann, E.	69, 108	Lametrie, De	414
installation(on-site)	281	international conventions	81	islands(urban)	129	Keizersgracht	121	laminated	286
installation(system choice(preliminary design stage(data(final stage)))	332	international design competition	360	ISO	348	Kemerovo	117	laminates	285
installation(trial)	329	international future(provincial present)	496	isolation	60, 105	Kempen, R.	57	laminating processes	285
installations	327	International Organisation for Standardisation	348	isolation with cellulose	427	Kern, H.	481, 482	Lammers, B.	311
installations(built-in space, appropriate spot)	330	international standard	360	isomorph graph	217	Kervel, E.	203	land division	316
installations(capacity)	330	internet	49, 237, 377	isomorphically	217	key (list)words	45	land measuring	477
installations(climate)	330	internet technologies	380	iterated choices	296	key aspects(design)	172	land(price)	267
installations(communication)	337	internet-journals'	52	iterating formula	256	key to symbols	189	land(water)	129
installations(design process)	332	interorganisational design	297	Iteration from vague to concrete	369	Keynes	414	landing	342
installations(flexible, adaptable)	330	interpolation(plan capacity)	173	iterations	369	key-word	12	landings	392
installations(programme of requirements, spaces not mentioned)	331	interpretable	395	iterative	96	key-words(from the gut)	476	landmark	441
installations(provisions)	347	interpretation	33, 60, 61, 71, 101, 240, 390, 444	iterative constraint	235	key-words(syntactically compiled)	49	landowners	493
installations(statement)	372	interpretation of data	138	<b>J</b>		KidPix	232	landscape(maximisation)	315
installations(technical)	326, 327, 346	interpretation of the assignment	107	Jacobs, D.	359	Kier, M.H.	373	landscape(urban)	468
instalment	350	interpretation of the concept	406	Jacobs, M.	185	Kindersdijk, M.J.M.	145, 152	landscape(urbanised)	134
instinctive actions	415	interpretation(commision)	474	Jager, A.	367	Kirkeby, P.	110, 111	landscape(water)	134
institutionalised	83	interpretation(current)	29	Jail design	170	Klaasen, I.T.	141, 181, 185, 187, 449	land-use plans	84
instruction(representation)	225	interpretation(descriptive)	20	Jakubowski, F.	104	Klee, P.	477	landuse policy	496
instructions(pictorial)	231	interpretation(design intentions)	144	James, W.	415	Kleefmann, F.	184	landuse programs	494
instrumentalism	415	interpretation(designerly(design expertise))	145	Jang, J-S.	382	Klerk, de	123	lane	430
insulation(thermal)	331	interpretation(ex post analysis)	276	Janis and Mann	59	Klerk, L. de	494	Langdon, P.	160
in-take	323	interpretation(history, building)	63	Jansen, F.W.	98, 120	Knoll, W.H.	329	language	414, 415, 416
in-take(building)	324	interpretation(imaginative)	20	Japanese	391	knot(factors)	138	language game	189
integer	206	interpretation(location)	36	jargon(architect)	404	knots	132	language game(designer, scholar, decision maker))	189
integral accessibility	276	interpretative 'cycles'	145	Java	229, 380	knowledge & insight	358	language game(empirical study)	190
integral calculation	205	interpretative(contextual)	67	Java island	435	knowledge and experience	392	language game(knowing, capability)	447
integral calculus	228	interrogated(architecture)	473	Jellema, R.	342	knowledge base systems	382	language game(management, design)	189
integral design task	101	intersect(form)	104	Jennings, N.R.	382	knowledge discovery	382	language of shapes	109
integration	26, 105, 106, 227, 346	intersecting volumes	489	Jerusalem(heavenly)	68	knowledge integration	378, 381	language(ambiguous, poly-interpretative, suggestive)	190
integration and co-ordination(Building)	117	interspace and rhythm	95	Jessop, W.N.	298	knowledge society	305	language(designer)	101
integration levels	346	inter-subjectivity	23, 55	Johnson, M.	478	knowledge(absence(hidden))	168	language(formal)	421
integration(function)	91	interval time	335	join(walls)	234	knowledge(architectural)	98	language(layered)	190
integration(horizontal)	26	interval values	206	joining	347, 348	knowledge(empirical, logical)	12	language(mathematical)	182
integration(synthesis)	421	interval(distance(places))	206	joint(rigidity)	286	knowledge(fill(gaps))	355	language(meta)	190
integration(systematic)	317	intervals	448	joints(welded)	394	knowledge(general)	26	language(object)	190
integration(vertical)	26	intervals(class)	256	joints	297, 298, 436	knowledge(growth)	179	language(pattern)	439
integration <sub>100m</sub> (function)	106	intervention	41	Jones, J.C.	33	knowledge(incomplete)	294	language(programming)	229
integration <sub>30m</sub> (function)	106	intervention study(changing one factor (controlled conditions))	328	Jong and Rosemann	56	knowledge(lack)	294	Lans and Van der Voordt	33
intellectual aptitude	100	intervention(adaptation)	324	Jong, F. de	419	knowledge(possibilities)	109	Lans, W	33, 53, 168
intellectual space	190	intervention(architectonic)	141	Jong, M. de	419	knowledge(science, capability, art)(experience(physical))	478	laser transit on the site(electronic)	383
intelligence(artificial)	378	intervention(design)	144	Jong, T.M. de	19, 21, 27, 33, 35, 37, 39, 41, 43, 56, 89, 97, 98, 103, 173, 179, 184, 185, 189, 200, 203, 253, 339, 370, 387, 413, 443, 446, 453, 455, 456, 457, 494, 498	knowledge-based systems	246	laughing(parallax)	414
intelligence(perseverance)	284	intervention(urban architectural)	132	Jong, W.R. de	194	known theory	400	law	34, 79
intelligent management	378	interventions(design(implications))	139	Jonge, H. de	169, 170, 269	Koch	226	law system	79
intended effect(drawing)	174	interventions(design)	418	Jouffroy	129	Koetter, F.	125, 126	law(administrative)	82
intended effects	149, 446	interview users	466	journalism	98, 143	Koffka, K.	241	law(building, 1901)	348
intent	441	interviews	25, 274	journals	249	Köhler, W.	241	law(civil)	82
intention	57	interviews(analysis of buildings)	118	journals(refereed)	329	Köhler, W.	241	law(code)	82
intentional projective model	184	interviews(occupants)	165	joy in design	286	Koning	81	law(complementing)	83
intentional-projective model	185	interviews(programming research)	267	joy in performance	286	Koolhaas, R.	108, 112, 114, 439	law(lack of clarity)	82
intentions	408	inter-weaving	105, 348			Kop van Zuid	267, 435, 439, 455		
		intra-mural facilities	310			Korteweg, P.J.	24		
		introduction	43			Kotler, P.	369		
		introspection	54			Koutamanis, A.	179, 231, 233, 235, 239, 243, 334		



law(sources)	81	levels decision making	347	construction(building(industrial(storey(one, multi, high-rise))), house(one-family, apartment)))	342	edges, areas, connections, land-marks)))	441	housing(satisfaction(residents))	163
Law, R.	255	levels of scale	167					market research	283
laws	331	levels of the design	438	load-bearing element	236	Lynch, K.	25, 438, 439	market(influences)	355
laws(casualty)	82	levels(design)	434	load-bearing wall	347			market(potential)	374
laws(shaping, creative, formative, Berlage)	119	levels(integration)	346	loads(external)	331			market(target segment)	374
Lawson, B.R.	58, 160, 188, 297	levels(scale)	421, 441	loads(internal)	331	<b>M</b>		market-indicators	167
lay person(architect, élite dictating good taste))	239	levels(typological)	113	loads(variable)	341, 342	M&T	12, 249	marketing influences	356
Lay, D.C.	223	Levesque, H.J.	233	lobby association	83	M(basis module)	348	marketing plan	369
layer(computer drawing)	210	Lévi-Strauss, C.	400, 414	local constraints	236	M16 bolts	279	marketing(pull effect)	284
layer(concept)	405	Levy	226	local variations	255	Maas, Buro	75, 77	market-orientated scenario	495
layer(transparent(rhythm(open, closed)))	429	L-formed lot	121	localised forces	286	Maas, W.	110	marketplace(competition)	418
layered language	190	liberating a context of its object	493	location	273, 314, 341	Maastricht	435, 439	marketposition of dwellings	167
layered structure	130, 131	liberating an object of its context	493	location analysis(history, plans, earlier initiatives, fascination, traffic)	419	Mácel, O.	61, 145	market-situation(European Union)	500
layers	106, 113	liberty(individual, common(planning))	491	location(amenities)	267	machine aesthetics	109	Marks, F.	439
layers of meaning	407	liberty(planning)	493	location(analysis)	419	Macintosh Powerbook	232	Marnixstraat	120
layers(final result(design))	421	libraries	90	location(building)	359, 372	Mack, T.P.	257	Marr, D.	232, 233, 235
layers(heads)	348	libraries(building plans)	57	location(choicce)	314	Mackworth, A.K.	235	Marshall, H.E.	167
layers(idea)	405	library	90, 276, 423	location(dependence)	367	magic touch	417	mass and volume(analysis of buildings)	118
layout(analysis of buildings)	117	library study	290	location(first visit)(trees(position), visual lines)	466	magior M(golden rule)	213	mass of the building	468
layout(general)	332	library(project)	101	location(footings, soil improvement, pile foundation, variable loads)	342	magnetic train(transcontinental)	495	mass study	103
layout(standard)	347	Lieberman, G.J.	222	location(industrial)	433	main building elements	345	mass(building)	372
layout(structural)	424	Liebermann	399	location(lines)	477	mainport	495	mass(heat accumulating)	332
Le Corbusier	59, 92, 108, 109, 118, 121, 126, 144, 152, 214, 392, 393, 401, 477, 481	life cycle costs	167	location(quality(reputation, acquaintance, social climate))	269	maintenance	274, 321, 330, 333	mass(space)	129
leakages	286	life span	329	location(selection(building))	419	maintenance experience	158	mass-production	348
Leaman, A.	335	life span(move(dwellers))	280	location(study)	287	maintenance technicians	327	master	101
learn designing	13	life(economical)	280	location(visit)	429, 432, 466	maintenance(accessible)	330	master and craftsman	416
learned by doing	478	life-cycle	372	location-independent	368	maintenance(skin)	337	master plan	315, 439, 460
learning by doing	101	life-cycle of a building	377	locations	347	Maison de Verre	394	master plans	435
learning context	338	life-cycle of a product	367, 369	Lochem, van	107	maker	405	masterplan	405
learning organisation	306	life-cycle period	169	Locke	414	making	483	matched concavities	243
learning professionals	305	life-cycle(duration)	367	locomotor system	415	making a model	481	material	337
learning techniques(self)	378	life-cycle(renting + exploiting + selling)	374	Loghem, J.B. van	117	making legends	35	material artefacts	367
learning to unlearn	395	life-span guarantee	356	logic	26, 254, 414	making of plans(decision making, participation, practicability, evaluation(feasibility(financial, social, legal, environmental, technical)))	433	material composition	370
learning without education	397	life-span(economic, functional, technical)	323	logic of classes	190	making(design)	478	material design	280
learning(distance)	381	light	95	logic of the building	468	making(model)	483	material development(parameters)	280
learning(potential)	308	light from above	467	logic of the end-product	409	making(science)	415	material environment	370
leaststructural height	407	light from the north	466	logic(degree of complexity)	191	malls	269	material(building)	279
lectures(project)	346	light simulation	246	logic(fuzzy)	194, 377, 382	management of consecutive design actions	417	material(engineering)	284
Lee, C.	299	light(patches(impressionism))	399	logic(logos)	193	management(orientated ICT)	377	material(less sophisticated types)	427
Leede, E. de	207	light-absorbent panels	391	logic(modal)	190	management(architectural design)	427	material(selection)	110
Leent, M. van	167	lighting	274, 331, 335	logic(negation(imagination(not the case)))	190	management(computer)	379	material(timber, steel, concrete, etc.)	345
Leeuwenberg, E.L.J.	242	lighting(artificial)	332, 425	logic(operation)	191	management(construction, discipline(architectural profession))	417	materialisation(computer)	379
Lefavre, L.	89, 103	lighting(tuning)	468	logic(predicator)	179, 191	management(empirical model)	417	materialisation(imaging)	483
Leferink, L.	181	lighting-window	425	logic(proposition)	191, 194	management(intelligent)	378	materialisationorientated ICT	377
leg room	393	light-spots	336	logical consistency	189	management(manufacturing)	379	materialised design	370
legal instrument	373	limitations(workshop project)	141	logical empiricism	414	management(construction, discipline(architectural profession))	417	materialising	279
legal precedents	79, 81	limited rationality	294	logical equivalence	193	management(design)	417	materialising(detailing)	326
legal requirements	325	limiting conditions	339	logical form	195	management(manufacturing)	379	materialism	414
legal rules(harmonising)	79	limiting reflections	336	logical form(description, proposition, deduction, causal explanation, reality)	200	management(manufacturing)	379	materials(application)	109
legal rules(scope)	79	Limits to Growth	182	logical operators	195	management(manufacturing)	379	materials(choice)	120
legality	79	limits(growth)	229	logical positivism	414	management(manufacturing)	379	materials(traditional)	281
legem dixit	475, 480	limits(population growth)	257	logical space	194	management(manufacturing)	379	materials(use)	372
legend	71, 92, 189	line drawings	231	logistical curve	257	management(manufacturing)	379	MathCad	225, 227
legend category	445	line of regression	253	logistical curves	229	management(manufacturing)	379	Mathematica	225, 227
legend transformation	445	line segment(vector)	211	logos	414	manmade	491	mathematical description	301
legend unit	103	line segments	244	Lomme, J.	185	manual	372	mathematical model	182, 301
legend(differences in nature)	208	line to plane	477	London	364	manual dexterity	415	mathematical models	181, 300
legend(symbol)	182	line(drawing)	444	longest path	218	manufacturability and price	380	mathematical operations(equality(supposition))	205
legenda	33, 173	line(moving(curved path))	487	long-term fundamental R & D	359	manufactured products	282	mathematical optimum	300
legenda(national perspectives)	498	line(points(intervals(decreasing)))	206	long-term time span	160	manufacturing	350	mathematical representation	298
legenda(size)	498	linear function(LP)	299	look(technical)	394	manufacturing(building)	281	mathematical science(Berlage)	119
legends	36, 173	linear objective-function	223	Loon, P.P. van	263, 293, 298, 299	manufacturing(custom)	380	mathematics	21, 203
legends units(elements in the programme(number))	210	linear programming	209, 218	Loos, A.	92, 108, 144, 145, 152	manipulation	114	mathematics(concepts, statements, expressions, models, declarations, sentences, full-sentence functions, workings, functions, operators(verbs, conjunctions))	204
legibility of the city	441	linear programming model	298	loose objects	114	manipulation and analysis	243	mathematics(equality(supposition))	205
legibility(explicit)	36	lines of the infrastructure	432	loose sketch	289	manipulation(interactive(computerised representation))	239	mathematics(history)	62
legibility(expressive)	36	lines(auxiliary)	290	Lootsma, F.A.	213	manmade	491	mathematics(repetition(equal))	205
legible	57	lines(existing)	317	Lopes, D.	231, 245	manual	372	Matlab	225, 227
legionella pneumophila	337	lines(location)	477	lot(L-formed)	121	manufacturing	350	matrices	211, 341
legislation	79, 435	lines(main)	429	lot(L-oblique sides)	121	manufacturing(building)	281	matrix calculation	222
legislation(criminal)	82	lines(visual)	466	Lotka-Volterra function	257	manufacturing(custom)	380	matrix calculation(unknown variables)	222
legislative prescriptions	151	lines-of-view	425	lots(17 <sup>th</sup> – 19 <sup>th</sup> century)	129	manipulation and analysis	243	matrix calculations	209
legitimacy	109	linguistic community	181	lots(adjacent)	122	manipulation(interactive(computerised representation))	239	matrix multiplication	222
Lehning, P.B.	159	linguistic confusions	189	Lottaz, C.	380	manmade	491	matrix(design game)	476
Leibniz	227, 240	linguistics	26	lounge	465, 467, 468	manual dexterity	415	matrix(evaluation)	341
Leiden	399, 423, 459, 499	link(dynamic)	238	Louvre	446	manufacturability and price	380	matrix(inverse)	222
Leidsche Rijn	439	linked	334	Louwe, J.	126, 131, 445	manufactured products	282	matrix(selection)	341
Leidseplein(Amsterdam)	120	linking	347	low density city	498	management(manufacturing)	379	matrs(function)	166
Leijten, J.L.	334	links(graph theory)	216	low final product costs	358	management(manufacturing)	379	matter	94
Lenep, D.J. van	55	list of conditions	395	lowered ceilings	336	management(manufacturing)	379	Mathews, G.	99
Leonidov	421	literature(history)	61	lowering of the peaks	335	management(manufacturing)	379	matting(representation)	246
less is more	406	literature(research)	25	low-rise tordo	490	management(manufacturing)	379	Matura system	354
letters(number(used))	210	lituus	475	LP	218	margin(accuracy)	212	maximisation	295
letting(potential)	158	live independently	310	LP model	298, 301	marginal returns(diminishing)	448	maximisation concept	314
Leupen, B.A.J.	107, 108, 109, 113, 114	Liverpool	364	Lucerne	407	margins(resolution)	211	maximisation models	316
level of abstraction	33	living(dispersed)	105	Luckhardt	114	margins(spaces(open, built-up))	440	maximisation of utility	296
level of ambition	464	load bearing construction	280	Luscuere, P.G.	334, 337, 338	Marken	188	maximisation(dominant values)	263
level of facilities	331	load bearing constructions	331, 345	luxury	273	market	368, 374	maximisations(individual)	316
level of scale	435	load bearing constructions	331, 345	Lynch	method(design element(routes, edges, areas, connections, land-marks)))	market (sub-system)	283	may be(possible)	191
level(aspiration)	295	load carrying component	345			market development	283	MAYA	379
level(scale)	37	load transfer	343			market investigation(final)	283	Mayne	473
levels	95	load(heat)	332			market need	374		
		load-bearing capacity	286			market opportunities	283		
		load-bearing construction	339			market parties	368		
		load-bearing				market position of			

mayor and aldermen(visit(blueprint, cross-section, façade))	468	method of design	97	minimal surfaces(drawn as rectangles)	467	model(reality)	183	morphological analysis(history)	63
McAlister, E.	242	method per context(series of phases and their sequences)	418	minimum of design interventions	445	model(rules(material, technique))	477	morphological method	340, 371
McCullough, M.	231, 378	method(analytical-systematic)	371	Minkovsky	226	model(scale)	179	morphological reconstruction(division, segmentation, tailoring, detailing)	445
McDowell, J.	245	method(associative(brainstorming))	371	Minnesota	169	model(sculpturing)	421	morphological requirements	288
McHarg, I.	76	method(associative)	340	minor m(golden rule)	213	model(spaciousness)	431	morphological(starting point)	418
McLoughlin, J.B.	298	method(basic allocation)	440	minutes(meeting)	447	model(spatial, verbal)	181	morphology	71, 125
Meadows, D.H.	185	method(confrontational)	340	miracles(box)	480	model(tested)	183	Morphosis	473
Meadows, D.L.	185	method(connectedness)	439	Miralles	473	model(theoretical)	329	most positive and most negative characteristics	158
mean	38, 54, 207, 219, 220, 253	method(counselling)	102	Miser	251	model(types(over-extension))	188	motif	101
meander(fractal)	226	method(decomposition)	439, 440	misinterpretations	120	model(verbal(concepts(defined variables)))	190	motive(guiding)	467
mean-field		method(delphi)	260	missing factors	93	model(working)	469	motives(architectural)	67
assumption(reduction(average))	255	method(description(language))	438	mission statement	308	model-like approach	438	motives(designer)	144
meaning	93	method(design(intuitive))	419	mission(enterprise)	373	modelling	253, 440	motives(recurring)	141
→ significance		method(design)	339, 433, 436	MIT	102	modelling(advanced)	378	motor vehicles	316
meaning of architecture(cultural minority)	420	method(design, explicit)	369	Mitchell, W.J.	231, 235, 237, 492	modelling(functions)	254	Moudun	126
meaning(context)	400	method(empirical)	448	Mitossi, V.	235, 239	modelling(functionalising (mathematical))	192	move(inclination)	158
meaning(form)	396	method(environment differentiation(intent, function, structure, form, content))	441	mixed sstructure(U U)	326	modelling(systems)	254	moved(people)	310
meaning(layers)	407	method(fixed way of acting)	437	mixing	73	models	101, 102, 251, 253, 438, 459, 464	movement(vector)	487
meaning(variety of people)	402	method(independent(use(intended)))	342	mixing(function)	324	models for predicting	251	movements(coherence(co-ordination, synchronisation))	415
meaningful	29	method(intuitive, explicit(intuition, analyses, selections))	339	mixture(heterogeneous)	105	models(3D(computer))	421	Mozart	409
meanings	392	method(morphological(combination(solution/problems)))	340	mobile home	352	models(city shape)	438	Muller, W.	187
meanings(chain)	393	method(morphological)	371	mobility scenarios	259	models(computer)	333	multi-actor	293, 378
meanings(defining)	99	method(multi criteria)	154	mock-up investigations	333	models(density)	438	multi-actor design optimisation	302
meanings(system)	400	method(perspectives and projects)	497	mock-up(full-scale)	456	models(digital)	102	multi-actor design	449
means	409	method(production)	279	modal logic	26, 190, 192	models(explaining(design))	161	multi-causal	449
means as well as the objective	12	method(recipe, ingredients(shopping list))	409	modal split	266	models(facilities)	438	multicentred network systems	194
means design	434	method(SAR-pattern)	440	modalities(scheme)	184	models(gravity)	267	multi-criteria method	454
means of design	29, 433, 438	method(scientific)	298	modality	26	models(history)	61	multi-disciplinary complexity	358
means orientated	29	method(systematic)	340	modality(schema)	184	models(mathematical)	300	multi-disciplinary design	339
means orientated study	328	method(theory(value pattern))	438	modality(possible)	191	models(physical)	102	multi-disciplinary teams	339
means orientated(study)	173	method(three traces)	439	modality(verbs)	189	models(prescriptive)	58, 298	multi-discipline	378
means(aim)	92, 93	method(three-traces)	440	mode	219	models(programming research)	267	multi-functional	449
means(aims)	253	method(working)	143, 427	mode of absolute determinism	474	models(reality(reduction(justifiable)))	181	multi-functional project	433
means(compositional)	89	methodical	362	mode of randomness	474	models(spatial)	145	multi-functionality	93, 367
means(minimum)	407	methodical approach	360	mode of the possible	448	models(staged)	370	multi-interest	378
means-orientated	418, 455	methodical founding	11	mode of what is desired	444	models(thought)	183	multi-level representations	243
means-orientated designing	455	methodical issues(media)	142	mode of what is possible	444	models(three-dimensional)	231	multi-level representations networks	237
means-orientated elaboration	416	methodical searching	60	model	20, 87, 96, 103, 113, 395, 439, 443, 465, 468	models(traffic)	438	multi-party	293
measurable	447	methodics	362	model based design	443	models(verbale)	189	multi-party negotiation and decision-making	303
measure(over)	392	methodological approach	25	model making	483	models(verbale, mathematical, spatial, mechanical)	181	multiplicating	206
measure(proportion)	118	methodological book	11	model of an urban system	183	modern architecture	285	multipurpose theatre	481
measure(scale)	348	methodological design	138	model on the basis of existing artefacts	144	modern art	416	multi-storey	342
measurement	25	methodological		model(1/100)	477	Modern Movement	96, 109	multi-valuable	207
measurement protocol	328	methodology	13, 362	model(3D)	359	modern movement(Dutch)	117	municipal administration	81
measurements	327	methodology for architecture	13	model(analogue)	181, 183	modernist architecture	234	municipal authorities(visit(blueprint, cross-section, façade))	468
measuring	207	methodology(architectural)	234	model(application, pre-suppositions(context))	187	modernity	122	Municipal Executive	83
measuring(analysis of buildings)	117	methodology(building)	249	model(architects)	99	modes(probable, possible, desirable)	447	municipality	81
measuring(land)	477	methodology(component development)	355	model(communicative function)	181	modesty(simplicity)	406	municipality(guidelines)	431
measuring-method	121	methodology(design)	249	model(conceptual(theory, sketch))	183	modifications	392	Muntplein	121
mechanical model	182	methodology(research)	24, 249	model(concrete(empirical identities(experimenting(realistic, matter)))	183	modular co-ordination	234, 345, 347	Muratori, S.	125, 126
mechanical models	181	methodology(understanding each other's methods)	418	model(concrete(national economy))	183	modular co-ordination for building	348	Musée à Croissance Elimitée	477
mechanics(applied)	346	methods	96	model(concrete, conceptual, formal)(explorative, descriptive, explicative, projective)	181	modular grid	123	musée imaginaire	391, 402
media	97, 101, 139, 142, 377	methods of building(traditional)	281	model(consistency)	179	modular system	348	museum	217, 459
Media Group(Delft)	142	methods of decisionmaking	496	model(context)	181	modular unit(smallest)	423	museum function(history)	66
media studies	142	methods of design	95, 139	model(cultural backgrounds)	181	module	120	Museum of Unlimited Extension	477
media(design)	96	methods of execution	358	model(descriptive)	184	module measure	120	museum park	461
median	207, 219	methods of research	95	model(design)	42	module size(structural)	425	museum(Dutch, National, Rijks)	118
medical care	268	methods of creative	371	model(discussion, participation, seduction, heuristic, action, execution)	184	module(basis) M	348	museum(Kröller Müller)	110
medium switch	181	methods(designer)	144	model(doll's house)	395	module(sizing)	425	musical composer	360
medium switch(model(verbale, spatial))	186	methods(housing appraisal)	165	model(explicative(question(why, because of what)))	184	module(standard, office)	424	Mutt	392
meeting rooms	275	methods(logicale-empirical)	12	model(explicative)	184	modules	124	MVRDV	110, 140
meeting the requirements	297	methods(over-value, rejecting)	437	model(explorative)	186	Modulor	108, 118, 121, 214	mystification(visualisation techniques)	233
meeting with the constructor	427	methods(production)	329	model(explorative, potential, projective)	184	modus	207	mythological figures(creating)	479
meeting(decision-making)	446	Methodion(poiësis(thinker))	479	model(formal (mathematical))	183	modus ponens	197	mythology	478
meeting(minutes)	447	metre	348	model(formal logical)	189	modus tollens	197	mythology(antiquity)	67
meetings	443	metropolis((connectedness, interaction))	493	model(function)	184	Moens, R.	33, 71		
Meijer, E.J.	465	metropolis(multi-centered)	496	model(ideal)	103	Molema, J.	117, 122, 123		
Mekking, A.J.J.	61	metropolitan	496	model(idealised)	370	Mondrianesque	391		
Mel'nikov study	145	metropolitan Debate	496	model(intentional projective)	184	money saver	165		
memories	245	metropolitan debates	497	model(intentional-projective)	185	monitor the range of attention	410		
memory component	244	metropolitan development	496	model(making)	481	monitored(design development)	143		
memory(collective)	106, 402	metropolitan development(economical, ecological, technological)	496	model(mathematical)	182, 301	monitoring	260		
Mendoza, E.	16	Meulen, van der	260	model(mechanical)	182	monitoring(design(execution))	160		
mental aggregate	236	Mey, van der	120, 123	model(over-extension)	181, 187	monocausally	449		
mental cross-breeding	405	Meyer, H.	60, 125, 435, 436	model(planning)	185	mono-functional	367		
mental experiment	145	mezzanine	342	model(predictive)	185	monolith concrete façade beams	325		
mental picture	440	Michelangelo	407	model(predictive, projective (probable))	184	monotony	172		
mental space	396	micro-organisms	337	model(projective(probable))	185	monotony and boredom	170		
Mentzel, M.	59	Mies van der Rohe, L.	108, 407	model(rail system)	182	montage of zones	114		
Meriggi, M.	145	Milan	113	model(reality(simplified rendering(present, future)))	181	Montagu, A.	413		
Merleau-Ponty, M.	474	Milieuwetgeving	81			Montesquieu, C. de	104		
Merz, M.	110	milieuzonering	81			monument	324		
metal boxes	391	minimal sizes	275			Monument Law	83		
meta-language	179, 190, 411					Monument Ordinance	83		
metaphor	423, 441					monuments	62		
metaphor(leading)	109					Moran, D.	414		
metaphor(travel case)	109					morling	110		
metaphoric concept	109					Morgan, M.	27, 91, 95, 108		
metaphorical	68					morpher	487		
metaphors	25, 102, 106, 245, 493					morphic numbers	215		
meta-plan method	308					morphological → formal			
method	12, 362, 470					morphological analysis	125		
method analysing a plan	128								
method Lynch	441								

## N

narrative	393	Nieuwe Bouwen	67	ground floor)	342	optimum distribution	297
narrow down	98	Nieuwe Vijzelstraat	121	one-storey building(construction)	342	optimum form	297
national networks	360	Nieuwenhuysen	54	one-storey buildings	342	optimum group design	301
national planning report(4 <sup>th</sup> )	496	nightmares	419	on-site assembly and installation	281	optimum professional design	293
national planning report(4 <sup>th</sup> , extra)	496	Nile	204	on-site demolition	81	optimum quality	302
national report on spatial planning(5 <sup>th</sup> )	497	Nîmes	392	on-site(controlled)	281	optimum social design	293
national rules	360	NIROV	266	Oosterhuis, K.	359, 364, 380	optimum(arithmetical)	297, 298
National Trust	69	NNAO	494, 495	OPeC-countries	494	optimum(mathematical)	300
natural numbers	204	NNAO(Foundations)	494	open and closed	429	optimum(social group)	293
natural ventilation	332	NNI	80, 273, 347, 348, 350, 373	open building block	114	optimum(technical group)	293
Naturalis	459	NNM	460	open communication	338	optimumselectionof subsolutions	302
nature	474	nodal bond(Gelder)	286	open connection	326	options(design)	144, 485
nature and culture	110	nodal bond(hinged)	286	open design	293, 302, 303	or	197
nature reserve	81	node(building)	345	open space(built-on space)	40	OR	197, 298
nature scenarios	259	node(building)(analysis)	353	open spaces(intermediary)	60	order	475
nature(agriculture)	495	node(building)(study)	351	open to communication, control and verification	362	order and complexity(perception)	241
nature(equality)	206	node(crossing)	218	Open University, The	183	order and contrast	95
Nauta, D.	181, 182, 183, 189	node(graph theory)	216	openable windows	335	order and structure	476
NBD	347	node(separational)	218	open-ended	303, 396	order of magnitude	206
n-conjunctive(graph)	218	nodes(connection(lines))	216	opening times	335	order(class(objects(perception)))	240
néant	416	nodes(dual)	217	open-mindedness(experience)	403	order(perception)	241
necessary condition	196	noise	465	operation(continuation)	242	ordered housing	219
necessary futures	492	noise(hindrance)	164	operation(design)	134	ordering	459
Nederlandsche Handel-Maat-		noise(installations)	331	operation(distribution)	242, 243	ordering concepts	429
schappij	118, 120, 121	noise-pollution zone	315	operation(grammar, mathematics)	225	ordering of the programme	436
need → demand, requirement		nomenclature	45	operation(iteration)	242	ordering studies	466
need for a new building(doubt)	427	nominal size(tolerance)	212	operation(logic)	191	ordering(formal)	433, 436, 438
need(creation)	368	nominal values	206	operation(reversal)	242	ordering(forming)	429
needs of the potential purchasers	374	nomological network	249	operation(symmetrical patterns)	242	ordering(functional)	438
needs(changing)	368	non planar(graph)	217	operationality(scientific)	446	ordering(space-time)	474
needs(new)	368	non-conjunctive graph	218	operational(optimisation)	221	ordering(spatial(establishing form), functional)	433
negation	416, 417	non-contingent states of dispersion	215	objectively rational	294	orderliness	95
negation(imagination(not the case))	190	non-designing	26	objective-mean-relations	371	orders of classical architecture	234
negative numbers	207	non-dichotomous	207	objectives	59	ordinal	206
neighbour's property	81	non-dimensional numbers	329	objectives and means(chain)	371	ordinal criteria	370
neighbourhood	429	non-linear relationships	382	objectives and wishes	271	organic type	104
neighbourhood(decline)	164	non-place	474	objectives begin to assume shape	406	organically(growing)	368
neighbourhood(entrance(estimate depth))	430	nonsensical shape	243	objectives(covering)	371	organisation	59
neighbourhood(residential)	433	nontransparent results	163	objectives(number)	367	organisation development	375
neighbourhoods	84	non-truth	189	objectivity	23, 53	organisation of the spaces(traffic, urban adjustment)	468
neighbours rights	81	Norberg-Schulz, Chr.	63	objects as well as their context	12	organisation process	375
Nemausus	392	norm	372	objects(determined)	20	organisation theory	444
NEN 1010	336	normal distribution	220	objects(familiar)	244	organisation to be housed	372
NEN 1824	276	normalisation	80, 128	objects(overlapping)	236	organisation(bisecting(building))	424
NEN 2658	272	Normalisation Institute(Netherlands)	348	objects(recognised(colour))	416	organisation(creative)	95
NEN 2880	349	normative	53	objects(suffering)	446	organisation(functional)	434
NEN 2883	349	normative architectural model	240	Oblast	117	organisation(learning)	306
NEN 5700	348	normative scenario	259	obscure(construction not recognised)	407	organisation(project)	331
NEN 6000	350	norms	370	observation	250	organisation(spatial functional)	434
NEN norms	370	norms(probability)	220	observation(grain(place, time))	201	organisation(spatial)	133
NEN-norms	80	norms(social)	307	observations(programming research)	267	organisational environment	373
NEN-standards	277	norms(technical)	80, 165	observe users	466	organisational form	374
neologisms	35	nostalgia	401	obvious	416	organisational science(opposition(average))	255
neopositivism	414	not	197	occupancy	335	organisational structure	218, 271
nested(cycle)	444	not anticipated consequences	159	occupancy rates	275	organisational structure(blueprints, floor plans, cross-sections)	276
nesting	48, 49	not intended(effects)	149	occupant reactions	334	organisational structure(history)	65
net profit(winners, losers)	300	not the case(imagination)	194	occupants poll	166	organisations	288
Netherlands 2050	495	not the case(truth)	190	occupants(preferences)	165	organisations(private)	81
Netherlands Architecture Institute	365, 379	notches	236	occupants(preferences)	165	organisations/mechanisms/concepts(new)	395
Netherlands Building-Trade Documenta-		notes	423, 466	opportunities	374	organogram	363
tion	347	not-here-and-now(imagination)	194	opportunities for choice(science)	307	orientation	58, 132, 441, 468
Netherlands in 2030	497	notrot, R.	145	opportunities(enterprise)	374	orientation preferences	243
Netherlands Institute of Architecture	494	noun	40, 200	opportunities(existing)	430	orientation(canonical)	243
Netherlands Normalisation Institute	80, 272, 348, 373	nouns	12	opportunities(external)	374	orientation(European)	494
Netherlands Now As Design	494	Nouvel, J.	108, 109, 395, 407, 408	oppositions(finding)	459	origin(co-ordinates)	211
Netherlands(transformations)	494	novel solutions	95	optimisation	168, 221, 293	original significance(history)	64
network	218, 377, 434	novelty	25, 28, 356	optimisation models(linear programming, transparent, democratical)	263	original state	470
network of the amenities	268	Novem	313	optimisation(boundary conditions)	221	original(origin)	124
network planning	218	nuclear fusion(energy)	495	optimisation(changing conditions)	221	Orlebeke, J.F.	329
network systems(multicentred)	494	null-hypothesis	12	optimisation(context)	221	ornamentation	108
network(cyclical)	218	number of objectives	367	optimisation(corner point)	221	ornamentation and symbol	95
network(European)	495	number of seats	275	optimisation(decision theory(conflicting requirements))	263	ortho's	487
network(graph theory)	218	number of users	274	optimisation(effective)	221	orthodoxy versus orthopraxy	245
networked thinking	380	number theory(sequencing)	205	optimisation(end, means)	221	orthogonal built structure	487
networking in the design process	377	number(ID)	205	optimisation(maximal)	221	orthogonal system	430
networks of elements	238	number(identification)	205	optimisation(object function)	221	orthographic projection	245
Neufert, E.	276	number(index)	205	optimisation(objective)	221	orthographic projection(salient features)	232
Neumeyer	68	number(nature(equality), place(difference))	206	optimisation(perspectives)	221	orthopraxy versus orthodoxy	245
neurophysiological system	413	number(quantily)	206	optimisation(professional group)	293	Osdorp	130
neuropsychological explanations	389	number(serial)	206	optimisation(remainder)	222	Ottenhof, F.	107
neutrality	53	numbering(serial)	206	optimisation(slack variables)	222	Otto, F.	209
new designs	35	numbering(serial)(categorising)	205	optimisation(social group)	293	Oudenbosch	67
new ideas(disseminating)	284	numbering(serial, sequence)	205	optimisation(solution space)	221	Our Common Future	181
new purpose(accommodate)	395	numbers(complex)	226	optimisation(verbale model(consensus(actors, umbrella concept, phased development))	263	outcome(collective)	296
new species	256	numbers(morphic)	215	optimise	293	outcomes of design	143
New Urbanity	436	numbers(natural)	204	optimising	209	outcomes(sum)	220
Newson, M.D.	186	numbers(non-dimensional)	329	optimising daylight	426	outline design	342
Newton	227, 269	numbers(prime)	124	optimising problems	227	outline master plan	317
Newtons binomium	209	numbers(rational)	204	optimum choice	297	outline plan	317
NHM	121	numbers(real)	204	optimum choice from alternative possibilities(planners)	298	outline plan(spatial)	340
niches(market)	374	numerable	447	optimum design	293, 297, 300, 302	outlines	244
Nichol, L.	100	numerical system	207	optimum design process	297		
Niederland, W.G.	401	Nussell(non-dimensional number)	329	optimum design(sub-designs)	298		
Niemeijer, J.	457	NWO	252				
Niessen, J.	171						



outmoded concept	389	partition constructions	331	perceptual arousal	240	physical protection	474	plans(zoning)	81
output	48	partition walls	332	perceptual complexity	240	physical relations in the building	427	planting	391
output(research)	141	partition walls(change per tenant)	332	perceptual organisation	242	physical relations(too long)	427	Plan-Zuid	128, 435
outside world(astonishment)	413	partitioned	290	Perec, G.	476	physical sensations	188	plastic number	214
outside(graph theory)	217	partitioning of the building	335	perfection	97	physical-chemical form	370	plasticity	487
outside(schale dependent)	190	partitioning(inner)	347	perfection(subconscious self)	459	physics	346, 414	Plato	414, 418, 478
overall requirements	340	part-product(detailed requirements)	340	perfectionism(growth(imperfection))	418	Piaget, J.	194, 413, 414, 415	playing	416
overall vision	406	part-products	339	performance checks	163	Pianka, E.R.	256	playing-field or -space of the possible	474
overcrowding	170	part-products(multi-disciplinary design)	339	performance criteria	240, 274, 275	Piano	213, 360	playing-field(culture)	474
overemphasising details	190	parts joined together	429	performance description	351	Picasso, P.	393, 408	pleasing(visually)	95
over-extension(model)	181	parts(entirety)	119	performance evaluation	163	Pickering, A.C.	328	plethora	203
overlap	93, 438	parts(replication)	489	performance of the building	350	pictograms(message)	406	plot divisions	40
overlapping between	39	parts(whole)	429	performance requirements	274, 306	pictorial instructions	231	plug-connection	350
overlapping concepts	38	part-solutions	340	performance requirements(technical context)	263	pictorial properties(visual perception)	245	plumber's work	336
overlapping objects	236	part-solutions(foundation, roof, floors)	341	performance score	167	picture → image	231	plumbing sub-system	280
overlaps(focus)	42	part-solutions(visualise(sketches))	341	performance(energy)	333	picture(adaptation)	462	plural solution	402
overloading	285	party(political)	492	performance(joy)	286	picture(mental)	440	pluralism	415
over-measure	392	Pascal	229	performance(measurement assessment)	163	picture's content	245	pluralistic society	433
owner of the building(analysis of buildings)	118	passages	129	performance(precision, price)	212	pictures(simple)	460	pluriform	368
owner of the problem	372	passing through	462	performance(properties(physical))	165	pile foundation	342	PMF-combination	374
		passion	419	performance(performance specified)	283	piles(driving)	280	POE	149, 151, 155, 163, 170, 276
		past(witnesses)	61	performances(building)	305	pilot study	142	poet	474
		Pastunink, J.	286	pergola	427	pilotis principle	392	poetry	407
		Pasveer, E.	436	perimeter	170	pioneering stage	369	poësis	479
		path(critical)	218	period of reliability	201	pipes	336	poësis(creation(abstract, spiritual))	478
		path(graph theory)	218	periodising(history)	67	pivot	224	point of departure	421, 455, 467, 470
		path(longest)	218	peripherally(localised(programme(quantity)))	215	pivot column	223	point of departure(quantity of daylight)	425
		path(shortest)	218	permutations	208, 209	pixel-orientated computer programme	210	point to line	477
		paths and planting	391	permutations with repetition	209	pixels(picture elements(screen))	210	point(measureless object, identification(interval))	206
		Patijn, W.	313	permutations without repetition	208	place	269, 441	pointed at(object language)	190
		pattern	93, 94, 440, 475	perseverance(intelligence)	284	Place Charles de Gaulle	446	points of decision	206
		pattern language	439	personal characteristics	274	place for discussion	275	points of departure	25, 374, 437
		pattern language(design problem)	442	personal events	419	place(difference)	206	points of departure(context(perspective))	174
		Palladian villas	237	personal ties	367	place(experience)	441	points(connection)	441
		Palladio motive	67	personnel	171	place(indication)	206	points(graph theory)	216
		Palladio, A.	104, 118	perspective	38, 51, 255	place(notion)	474	Pol, L. van der	115
		Palmboom, F.	76, 131	perspective(careful)	494	place(sense of)	95	Polak, B. M.	275
		panel(façade)	346	perspective(critical)	495	place(space)	403	plan	106, 131
		panelling	332	perspective(drawing board(confusion of observation standpoints))	188	placing of the lights	336	→ design	274
		Panerai	126	perspective(drawing)	174	plan analyses(evaluation ex post)	152	police ordinance	274
		panorama	474	perspective(dynamic)	495	plan analysis	58	policy	494
		panorama(circumscription)	474	perspective(evaluation)	149	plan configurations	133	policy document on landuse planning(4 <sup>th</sup> , 1988)	495
		Panoramas	129	perspective(explicit)	174	plan criticism	125	policy formulation	374
		panorame-theatre	480	perspective(material, social)	90	plan documentation	57	policy scenarios	259
		Pantheon	66	perspective(policy(critical, dynamic, careful, relaxed)(water system, agriculture, international connections, multicentred network systems))	494	plan horizon	38, 51	policy statement	369
		Papini, G.	415	perspective(probable future)	446	plan(horizon)	128	policy(anti-metropolitan)	496
		parabolic roof	115	perspective(projects, strategy)	496	plan(analyis(method))	59	policy(concept)	498
		paradigm	400	perspective(relaxed)	495	plan(formulation)	59	policy(dispersal, concentration)(research and design programme)	498
		paradigms	391	perspectives	21	plan(global)(municipality)	459	policy(landuse)	496
		paragraphs	43, 46	perspectives and projects	497	plan(marketing)	369	policy(national(space))	162
		parallax	414	perspectives(optimisation)	221	plan(outline)	317	policy(spatial)	270
		parameter	256	persuaded(studies, examples)	427	plan(outline)	340	policy(target figure, limiting values)	259
		parameters	225, 255	persuasion	295	plan(urban)	460	political agenda	496
		parameters(too many)	256	Peters, J.	159	planar graph	217	political breakthrough	495
		parametric complexity	242	Peutz	291	plandevelopment(phased)	306	political decision-making process	307
		Pareto	299	Pevsner, N.	68	plane to volume	477	political options(comparable)	494
		Pareto's criterion	299	phase → stage	370	planes(graph)	217	political options(design)	495
		Paris	446	phase models	340	planlibre(Raumplan)	92	political parties	492
		parked cars	392	phase(analysis)	340	planning	59, 415, 433	political priorities(economic growth, social equity, environmental sustainability, cultural identity)	494
		parking area	269	phase(convergence(combination(part solutions)))	339	planning and design	249	politics(debate)	14
		parking lots	465	phase(creative)(analysis, synthesis, evaluation)	340	planning concept	186	poll(occupants)	166
		parking place	269	phase(differences(creative process, interim products))	418	planning cycle	160	polls	25
		parking spaces	269	phase(divergence(increase(possible variations))	339	planning figures	436	pollution(soil, air)	164
		parking strips	392	phase(evaluation)	340	planning institutes of central government	497	poly(carbonates)	285
		parking(index numbers)	266	phase(execution)	340	planning model	184, 185	polygon(perception)	240
		Parma	126	phase(implementation)	340	planning principles	60	poly-interpretable(language (designer))	190
		Parsons, T.	104	phase(inception)	377	planning process	151	polymers	285
		part-assignment	341	phase(synthesis)	340	planning process(activities(timetable), learning process)	298	polymers(amorphous)	285
		part-assignment(plan(spatial), programme of requirements)	340	phased plan development	306	planning techniques(quantitative)	298	ponens(modus)	197
		part-designers	359	phases(design process)	116	planning theory	298	POPO	357
		part-designs	339, 363	phases(previous)	417	planning free agents)	491	Popper, K.R.	24, 255
		partial building groups	349	phenomenological approach	33, 54, 55	planning(functional)	436	population prognoses	251
		partial designs	369	phenomenology	414	planning(future(action, conditions, situation, uncertainty))	491	population size	328
		partial event	219	phenomenon	485	planning(level of scale(concentration, deconcentration))	494	population structure	268
		partial qualities	154	philology	387	planning(model(intentional projective))	184	population(control(double-blind study))	328
		participants	443	philosophy	478	planning(network)	218	population(Europe)	258
		participants in the building process	377	philosophy(Greek)	478	planning(opposition(possible?(future responsibility)), personal liberty?)	493	PoR	370, 372
		participants in the decision-making(perspective(probable future))	446	philosophy(mythology)	479	planning(participants)	491	portfolio analyses	167
		participants in three rôles(persons deciding, agents in initiating, citizens in defining and selecting perspectives)	497	Phoenician trade	204	planning(possible?(Christianity, humanity))	491	portfolio of projects	497
		participants(construction process)	51	photo computer programme	210	planning(responsibility)	491	Portoghesi, P.	68
		participants(influence)	339	photo-realistic renderings	231	planning(strategic)	498	position determining	473
		participation	433	photo-realistic visualisation	245	planning(support points)	342	positioning(size)	345
		participation model	184	physical building conditions	273	planning(sizing)	414	positioning(sizing)	349
		participation(clients, users)	151	physical conditions	275	planning(strategic)	498	postivism(logical)	414
		participants in planning(landowners, users, developers, government)	493	Physical Planning Act	84	planning(strategic)	498	possibilities(best)	305
		particular to the general	191	Physical Planning Key-Decision	84	plans(alternative)	60	possibilities(combination)	219
		parties(buiding process)	271					possibilities(improbable)	26
		parties(identification)	363						
		parties(market)	368						

## P



possibilities(knowledge)	109	preferences(functional, translation)	163	probable consequences	159	products they are marketing	374	matters)	272
possibilities(laws and rules)	271	preferences(occupants)	165	probable desires	444	products(end)	367	programme of requirements(urban	
possibilities(reduce(problem formula-		preferences(occupants')	165	probable future	446	products(manufactured)	282	level))	263
tion, objective, site, programme of		preferences(personal)	97	probable futures	492	profession profiles(Delft University Mas-		programme of	
requirements, precedents, design		preferences(standard)	165	problem	58, 251, 253, 294, 373, 416	ter of Science)	358	requirements(urban(amenities,	
study, typological study, concept))	255	preferred temperature	334	problem definition	341	professional commission	473	business))	265
possibilities(wider range)	389	Preiser, W.F.E.	151, 152, 276	problem formulation	12, 59, 254	professional conditioning	473	programme of requirements(urban,	
possibility	25, 48	prejudices	395	problem owner	373	professional design	393	architectural, constructive)	263
possibility of change(design)	99	preliminary design283, 336, 338, 372, 427		problem owners	374	professional designer	358	programme of requirements(urban,	
possible	26, 444, 474, 478	preliminary design proposal	371	problem proposition	29	professional group optimisation	293	quantitative(to be realised),	
possible arrangements	207	preliminary design stage	332	problem signalling(predicting(wishes,		professional skills(use)	168	qualitative(liveability, sphere, safety,	
possible combinations	219	preliminary investigations	138	probabilities))	253	professionalised	83	sustainability))	265
possible consequences	162	preliminary programme	309	problem situations	151	professionals(learning)	305	programme of requirements(verbal	
possible future developments	161	Preller, L.	328	problem solving	369	professionals(routine & intuition)	357	model, package of objectives)	186
possible problems	470	premises(lacking)	200	problem solving processes	58	profile(asymmetrical)	446	programme of requirements(verify	
possible to retrieve	35	premises(true)	191	problem solving studies	328	profile(symmetrical)	446	(visits))	466
possible to talk about	35	premonition	411	problem spotting	253	profit(net)(winners, losers)	300	programme utilisation	434
possible variations	339	pre-occupations	421	problem statement	370	prognoses(economic)	251	programme(allocating)	439
possible(conditions)	254	pre-occupations(designing)	419	problem(definition)	89	prognoses(environmental)	251	programme(base)	374
possible(improbable)	339	preoccupied with the possibilities	410	problem(diagnosis)	154	programmable component(design)	290	programme(breaking open)	390
possible(playing field)	474	preparation	58	problem(forecasted, signalled)	253	programmable data	277	programme(businesses)	269
possibly adaptation	372	preparation of a brief	274	problem(formulating)	251	programmable differentiation	438	programme(demand side(index	
postal code	205	prescriptive	79	problem(formulation)	192	programme advisor	276	numbers(planning))	266
post-assembled	281	prescriptive models	58, 298	problem(image)	294	programme consultants	276	programme(function)	94
postcodes	51	prescriptive research	53	problem(owner)	372	programme elements(functional-spatial		programme(housing, derived	
post-occupancy evaluation	58, 149, 151,	prescriptive(systems)	239	problem(perception)	255	organisation(reference images, struc-		functions(amenities(population))	265
163, 170, 250, 275, 276, 328, 334		prescripts(generally binding)	80	problem(problem)	473	ture, function(housing,		programme(ordering)	436
post-project evaluation	334	present(potential(future))	491	problem(spotting, solving)	374	amenities(shops, restaurants, schools,		programme(preliminary)	309
potential	73	presentation	340, 477	problem(type)	437	hospitals, theatres)))(quantitative,		programme(quantitative(site, object))	209
potential chart	186	presentation drawings	290	problems that are not clearly defined	378	qualitative))	265	programme(quantify(form)	215
potential fitness	403	presentation in a decision-making meet-		problems(allocating)	374	programme of requirements	19, 60, 89,	programme(quantify)	208
potential for execution	438	ing	446	problems(future(desirable(proba-		149, 208, 251, 287, 306, 314, 340, 370,		programme(sculpturing(model))	421
potential for letting	158	presentation(ICT)	378	ble))	263	418, 419, 423, 443, 464		programme(spatial translation)	438
potential for renovation	323	presentation(week before)	421	problems(set)	253	→ brief, specification, task		programme(supply side(critical	
potential future	492	presentations	470	problems(tame(cheap explanations, vi-		programme of requirements study	291	mass(inhabitants,	
potential of the future	491	Press, M.	98	able solutions))	433	programme of requirements(acting com-		potentials(area)(design study, study	
potential solutions(variety)	96	prestige of location	270	problems(wicked(lacking		municatively, agents)	305	by design))	266
potentials and restrictions	389	pre-stressed	285	consensus(pluralistic society))	433	programme of requirements(actual con-		programme(workshop project)	141
potentials of an existing area	455	pre-stressed glass	285	process consultant	306	text)	265	programmes(producer's)	365
potentials of things	395	pre-supposed categories	444	process management	356	programme of requirements(building		programmes(task setting)	267
potentials(area)	267	pre-supposed in communication	416	process(concentric way)	369	level)	263	programmes(varying)	20
potentials(functional)	93	pre-supposes	33	process(content)	306	programme of requirements(contents)	372	programming	271
potentials(ideas)	96	pre-supposition	21, 35	process(criticism)	307	programme of		programming language	229
Potting, A.	167	pre-supposition(innocation)	199	process(decision)	124	requirements(context(national, regional,		programming of amenities	265
power game	303	pre-suppositions	254, 416	process(design)	107, 108, 287, 339	local)(social, physical))	263	programming phase(expertise)	151
power(distributions)	306	pre-suppositions(cultural)	40	process(designing)	94	programme of requirements(cultural,		programming research(focus)	266
pp-partnerships	161	pre-suppositions(people)	23	process(enhancing)	309	aesthetic, economic, climatical, techni-		programming stage(distinct)	272
practicability	433	pre-suppositions(unmentioned)	200	process(facilitator)	308	cal, judicial)	271	programming(linear)	218
practice	338	pretext and catalyst	397	process(helix-wise)	369	programme of requirements(design		progressing insight	24
pragmatic nature engineer	421	previous phases	417	process(implementation)	151	process)	459	project activities	218
pragmatism	415	price / performance ratio	165	process(intuitive)	292	programme of requirements(direc-		project and study proposals	11
Prägnanz(perception)	241	price(land)	267	process(iteration)	369	tives)	277	project definition	338
Prandl(non-dimensional number)	329	price(precision, performance)	212	process(planning)	151	programme of		project developer(rôle)	373
praxis	479	price-quality ratio	350	process(steps(explicit))	409	requirements(forecasting(problem		project development(routing)	167
praxis(creating(using, executing,		Priemus, H.	12, 13, 53, 179, 249, 253	process(thought)	389	spotting))	179	project lectures	346
performing(virtuosos))	478	primary schools(Almere)	171	Proclus	203	programme of requirements(functional		project library	101
precedent	124	prime numbers	415	produce tools	215	analysis(evaluative studies))	263	project organisation	331, 338
precedent based design	238	producer bound component designer	361	product	370	programme of requirements(intended		project requirements	108
precedent(design(comparing))	143	producer's programs	365	product description	282	effect)	174	project result	374
precedent(emblematic)	143	producer's risk	212	product designing	369	programme of requirements(inventory of		project specifications	282
precedent(magazines(legal))	81	product	370	product development	370	wishes(users(present, future))	263	project study	324
precedents	60, 90, 96, 101, 102, 145, 152,	product description	282	product development process	369, 375	programme of requirements(kinds)	372	Project Group MC+B	350
238, 250, 275, 276, 443		product design	369	product development(optimising a spa-		programme of requirements(laws, stand-		project(duration(minimal))	218
precedents(legal)	79, 81	product development	370	tial solution)	456	ards, rules)	331	project(from scratch)	145
pre-component(fabricated)	427	product development process	369, 375	product development(product develop-		programme of requirements(making)	420	project(multi-functional)	433
pre-conceptions	391	product development(optimising a spa-		ment)	350	programme of requirements(model		project(perspective, strategy)	496
pre-conceptual	473	product development(optimising a spa-		product enterprise	373	(future(desirable(probable)))	263	project-driven activity	359
pre-condition	13, 41	product description	369	product evaluation	151	programme of requirements(newly to be		projecting(morphological(starting	
pre-condition for thinking	413	product designing	369	product ideas	374	built area, existing built situation)(ex		point))	418
pre-conditions(clarifying)	313	product development	370	product information system	165	post research)	265	projection	414, 418
predecessors(activity(project(graph		product development process	369, 375	product orientated evaluation	154	programme of requirements(normative		projection(abstract principle)	474
theory))	218	product development(optimising a spa-		product planning	369, 374	idea, programming research)	265	projection(geometry)	215, 216
pre-design research	151	product development(optimising a spa-		product range	355	programme of requirements(office		projection(orthographic)	245
pre-design study	455	tial solution)	456	product(architectural)	367	space(employees and further		projection-theatre	480
predicate	48	product development(product develop-		product(concept)	406	functions(conference space, archive,		projective	184
predicate logic	179, 191, 192	ment)	350	product(exterior, interior(architecture))	368	office restaurant, laboratory, library,		projective scenario	259
predicate(subject)	190	product enterprise	373	product(function)	370	printing shop, office for mail))	423	projects tend to be too detailed	497
predict new formations	416	product evaluation	151	product(idea(transformation))	374	programme of		projects(perspectives)	497
predictability(effect)	162	product ideas	374	product(idea)	405	requirements(operationalisations)	159	projects(portfolio)	497
prediction	250, 448	product information system	165	product(industrial)	367	programme of		projects(strategic)	499
prediction(context)	255	product orientated evaluation	154	product(life-cycle)	367	requirements(organisation(tri-		promenade	480
prediction(reduction(freedom of		product planning	369, 374	product(new)	369	partition(directorale, departments,		pronunciation(design))	475
change(variables))	189	product range	355	product(standard)	283, 355	services))	423	propensity(scientific)	28
prediction(scientific)	19	product(architectural)	367	product(zero-defect)	365	programme of requirements(performance		properties(different, dissimilar)	166
predictions	253	product(concept)	406	production development	375	checks)	163	properties(parameter(constraints))	234
predictions(variables, relations)	447	product(exterior, interior(architecture))	368	production environment	359	programme of requirements(performance		property	39, 40
predictions(verifiable)	250	product(function)	370	production environments	281	(description))	271	property boundary	391
predictive empiricism	416	product(idea(transformation))	374	production method	279	programme of requirements(phasing)	308	property(intellectual)	80
predictive model	185	product(idea)	405	production methods	329	programme of requirements		proponent	13
pre-fabricated component	427	product(industrial)	367	production(building)	281	(solutions)	271	proportion	95, 123, 234, 240, 483
pre-fabricated concrete linkages	325	product(life-cycle)	369	production(custom)	380	programme of requirements(statistical		proportion and measure	
pre-fabricated products(adapted)	352	private and public properties	432	production(standardised)	380	prognoses, scenarios(spatial conse-		systems(analysis of buildings)	118
pre-fabricating	350	private individuals	81	production(type)	346	quences))	263	proportion and size	95
pre-fabrication	281, 348	private organisations	81	production-technical influences	355	programme of requirements(succinct)	371	proportion(constallation, composition)	445
preference orderings	295	private parties	80			programme of requirements(surfaces,		proportion(measure)	118
preference(aesthetic)	239	private space	135			function and intention)	466	proportional system	118, 119, 121, 124
preferences and needs(taste)	307	private(public)	129			programme of requirements(technical		proportional system(regulating)	123
		probability	25						
		probability area	220						
		probability area(95%)	220						
		probability calculus	207						
		probability theory	209						
		probable	26, 219, 444						

proportionality	118	quality/cost rating	163	recognisability (colour, shape)	91	reflection co-efficients	336	representation (grouping (pattern (atomic parts)))	235
proportions	109, 234	quantitative	56	recognising	244, 390	reflection (surface)	490	representation (implementation (computer application))	233
proportions (building (parts))	288	quantitative attributes	186	recognition	71, 400	reflections	336	representation (level (chunks, partitions, clusters))	233
proposal (design)	95	quantities and combinations	389	recognition of a scene	243	reflections (design)	140	representation (mathematical)	298
proposition	179	quantor (all)	193	recognition (line drawings (edge junctions (convex, concave)))	235	refutability	24	representation (multi-level structure (abstraction, sub-division))	235
proposition logic	191, 192, 194	quantor (existence)	193	recognition (visual) (components (canonical parts))	235	refutation	27	representation (objective)	240
proposition (logical form)	200	quantors	199	recognition-by-components	243, 244	regional level	84	representation (pictorial)	231
propositions	191	Quatremère de Quincy	113	recomposing	101	regional plan	434	representation (purpose, scale (city blocks, buildings, components, elements), abstraction)	233
propositions (design)	95	Quatro	356	reconstruct (research (design document based))	144	regional plans	84	representation (screen)	49
proscenium	112	query terms	238	reconstruct (visual experience)	245	register	45	representation (stereotypes (architectural (known solutions, building regulations, professional codes)))	236
proscriptive (rules)	239	question	473	reconstructed (design/development)	143	register of Dutch architects	359	representation (symbolic (relations between objects))	234
prospective	184	questionnaire	56, 328	reconstructed (history)	62	registering (visual representations)	231	representation (symbolic)	233
prospective scenario	259	questionnaires	275, 329	reconstructing	128	regulation (spatial planning)	435	representations networks (multi-level)	237
prospective value	104	questions of the study	420	reconstructing (design choices)	144	regulation (aesthetics)	81	representations (abstract)	237
protection	325	questions (what, how, why)	138	reconstruction	35	regulations (public law)	80	representations (alternative)	232
proto-forms (abstraction (syntactic))	406	questions, fundamental to creating	473	reconstruction (re-creation)	44	regulations (onsite demolition)	81	representations (architectural)	233
prototype	103, 169, 282, 445	quick and dirty	155	reconstruction (re-creation)	44	regulations (public law)	80	representations (atomistic, relational)	243
prototypes	238	quiescence	407	reconstruction (re-creation)	44	re-invent	356	representations (computerised (meaningful feedback (explicit relations between elements)))	236
prototypical buildings	172	quietness	120	reconstruction (re-creation)	44	re-inventing	96	representations (design)	238
prototypical patterns	237	quotable drawing	173	recreation (potential)	491	rejection	417	representations (holistic (complexity, size))	234
protruding box	426			recreative quality (waterfront)	134	relating two variables (arrangement of values)	447	representations (multi-level)	243
protruding elements	481			rectangle 1 to 2	123	relation	39, 353	representations (two dimensional)	102
Prouvé	281			rectangle (perception)	241	relation (causal)	328	representations (two-dimensional)	231
provenance (history)	62	<b>R</b>	204	rectangular arrangement	244	relation (content)	305, 306	representations (visual, mental) (external versions)	231
Provence (Cézanne)	399	R & D	139, 359	rectangular (reduction)	462	relation (formal)	492	representativeness	122
providers	271	Raad van State	83	rectangularity	121, 215	relations (internal)	353	representing	244
providers (installation)	338	Rabinowitz, R.H.	151, 152	recurring design themes	485	relations (networks of constraints)	234	reproducible in series	391
provincial air	495	radial	170	recurring formal themes	96	relations (separations, connections)	368	reproduction techniques	73
proximity (perception)	241	radius	445	recurring motives	141	relationship between variables (simulation)	447	re-programming (existing programme)	265
pseudo certainty	187	rail (traditional notions)	499	recycling	323	relationships (establishing)	99	re-programming (existing situations)	263
psychiatry	415	railings	421	Redding, O.	419	relevance	64	reputation	269
psychological barrier	390	railway emplacement	433	re-design	323, 445	relevance (scientific)	24	required areas	274
psychological induction process	250	railway (high speed, circle line)	495	re-design with renovation activities	323	relevance (social)	24	requirement not linked to concept	464
psychologist (developmental)	413	railway (noise requirements)	430	re-designed from scratch	445	relevant variables	154	requirement not linked to the concept	470
psychology	252, 387	railway (platform of exchange)	477	red-light district	419	reliability	92, 155, 418	requirement (additional)	427
psychology (development)	106	rainwater infiltration	315	reduce uncertainties	491	reliability (empirical)	23	requirement (concept)	432
public health system	169	raised floors	332, 337	reducing complexity	141	reliability (external)	23	requirements	455
public knowledge (law)	80	Ramondt, J.J.	444	reducing (slow removal (superfluous))	459	reliability (internal)	23	→ demand, need	
public space	135, 368, 432, 434	Rand	185	reduction	97, 444, 449, 462	reliability (period)	201	requirements (changing)	455
public spaces	433, 434	Rand Corporation	250	reduction into discussable topics	462	reliability (verbal models (reality))	189	requirements (clarifying)	313
public transport	268, 313, 316, 335	Randen, A. van	347, 350	reduction of doubts	168	reliable	22	requirements (comfort and usage (building function))	330
public transport by rail (traditional notions)	499	random ideas	408	reduction of perceptions	447	reliable statements (population size)	328	requirements (comfort)	330
public transportation	465	Randstad	36	reduction to place and time	447	Renaissance north of the Alps	66	requirements (demand)	283
public urgency	189	Randstad (alternatives)	256	reduction to place and/or time (variables (relation))	447	render	410	requirements (detailed)	340
Public Works, Housing and Environment	83	rarities	256	reduction to sort	447	rendering by drawing	411	requirements (environmental)	323
public (private)	129	Rashid	473	reduction (agenda (policy maker))	189	rendering techniques	245	requirements (essentials)	459
publications (analysis of buildings)	118	rating (quality/cost)	163	reduction (concept)	407	renderings (photo-realistic)	231	requirements (functional (building))	330
public-private committee	496	ratio (geometrical series)	213	reduction (legend (designer))	189	renewed usage	64	requirements (legal)	325
publishing (developers (profit))	329	rational choice	208	reduction (location, time)	447	renovating	310	requirements (morphological)	288
pull effect marketing	284	rational choice theory	295	reduction (possible, desirable)	444	renovation	64, 70, 321, 323, 368	requirements (new)	367
pull-out stands	395	rational number	207	reduction (variables (empirical research))	189	renovation activities	164	requirements (overall)	340
puppet-theatre	480	rational numbers	204	reductionism	97	renovation project	419	requirements (project)	108
purchasing power	268	rational value	207	reductions	25	rent (basic)	167	research	19, 24, 98, 400
purity (architectural)	392	rational (objectively)	294	redundant (perception)	242	rent (reference)	167	→ investigation, inquiry, survey, study	
purpose (original)	393	rational (subjectively)	294	Reeshof	314	rented dwellings	167	research & development (application oriented, project-driven, long-term fundamental)	358
pursuit (individual)	296	rationalism	414, 418	refer	11	repertoire	444	research 'construct'	142
pyramid	104, 474, 487	rationality	295	refereed journals	329	repertory (design)	133	research activity (starting point)	485
Pythagoras	204, 240	Raumplan versus Plan Libre	144	referees	52	repertory (routine)	133	research and design programme	498
		Raumplan (plan libre)	92	reference	43	repetition (perception)	241	research and development	139
<b>Q</b>		readable (drawing)	51	reference data	43	repetitive configuration	244	research construct	145
Q	204	reading the site	444	reference images	133	replacement	337	research context	95
Quade, E.S.	251, 254	reading (signs)	475	reference list	43	replacement (accessible)	330	research driven design	21, 159
quadratic holes	473	re-adjustment	321	reference points	143	replica	67	research findings	97
quadratic structure	464	real	474, 478	reference projects	275, 276	report on planning (5 <sup>th</sup> )	499	research into design	99
qualitative	56	Real Estate and Project Management	160	reference projects (database)	172	report (reference)	45	research level	484
qualitative classes	154	real estate consultancy		reference projects (database)	162	report (research)	329	research method	29
qualitative properties	186	agencies (pessimistic view)	270	reference type	44	representation of spaces	244	research methodology	12, 249
qualities	101	real estate norm	155	reference (artwork)	45	representation (analogue (limited (human interpretation)))	236	research output	141
qualities (autonomous)	126	real numbers	204, 207	reference (audiovisual material)	45	representation (analytical)	238	research potential (design process)	140
qualities (ideas)	96	real-estate market	368	reference (authors, year, title, place, publisher)	44	representation (computer (objects (occupying the same space, overlapping)))	236	research procedures (innovative)	139
qualities (partial)	154	realisation orientated ICT	377	reference (book section)	44	representation (configuration (selective mental aggregate))	236	research project (architecture)	99
quality assessment (housing)	163	realisation (possibility)	26	reference (book)	44	representation (configuration (selective mental aggregate))	236	research proposal	98
quality assurance	281, 355	realism/relativism	418	reference (communication (personal))	45	representation (frame based)	237	research proposals	49
quality assurance plan	366	reality	87, 395, 414	reference (computer programme)	45	representation (graphic)	411	research reports	329
quality assurance process	281	reality (distance)	474	reference (conference proceedings)	45			research techniques	12
quality control	359, 365	reality (simplification, reduction (conscious, unconscious))	181	reference (confusing (spatial scales))	188			research (aim orientated)	92, 93
quality control (process)	365	reality (somatic)	478	reference (context (comparable))	27			research (analytical, comparative)	137
quality jump	306	reality (systems)	181	reference (edited book)	44			research (andante)	160
quality manuals	365	reason (arithmetical series)	212	reference (electronic source)	45			research (architectural heterogeneity)	252
quality (aesthetic)	158	reasoning (deductive form)	369	reference (frame)	396, 399, 403			research (architectural)	249
quality (architectural)	297	reasoning (Delfish stuff)	421	reference (journal article)	45				
quality (functional)	158	reasoning (experience)	191	reference (magazine article)	45				
quality (functional, aesthetic, technical, economical)	152	reasoning (inductive)	400, 406	reference (map)	45				
quality (optimum)	302	reasoning (innovation)	369	reference (newspaper article)	45				
quality (originality)	357	reception lobby	335	reference (patent)	45				
quality (related (balanced, integrated) (attributes (building, environment)) (satisfaction (needs)))	153	receptive (concentration (selective blindness))	400	reference (thesis)	45				
quality (requirements)	153	receptivity	396	references	43, 60, 443				
quality (statement)	372	recipe	409, 416	references (implicit)	89, 173				
quality (usage)	166	recipes	417	references (list)	43, 46				
quality/cost assessment	167	recognisability	443	referencing (cross)	143, 145				
		recognisable objects	91	reflecting strips	426				
		recognisable patterns	392	reflection	97, 143				
		recognised	413						
		recognisability	91						

research(artefacts)	143	resources(finite)	300	roofed central hall	326	Sartre, J.P.	414	Schiedam	292
research(comparative design based)	144	resources(scarce)	293	room module(size)	425	Sasieni, M.W.	298	Schiller, F.C.S.	415
research(comparative)	144	respect for the past	391	room(leg)	393	Sassen, S.	495	Schiller-Brager, G.	334
research(composition(conception, perception))	139	respondents(a-select)	374	room(shape, size, materials applied, interior/exterior relationships, facilities)	153	satellite image	71	Schliemann	401
research(composition(design driven(types)))	137	response(unrestricted)	293	Rozenburg, N.F.M.	160, 199, 361, 367, 369, 370	satisfaction(residents)	163	Schmitt, G.	378
research(cycles)	139	responses(concept)	406	rotation	114, 487	satisfies(logic)	193	Schokker, J.T.	79
research(describing)	21	responsibilities(design)	306	rotation(direction)	487	satisfying principle	294	scholarly designers	360
research(descriptive)	53, 138, 141, 143, 144	responsibilities(separate)	372	Rotterdam	267, 269, 360, 365, 419, 435, 439, 455, 495	saturation stage	369	scholarly identity	369
research(design activity driven)	140	responsibility(participating)	491	rough draft	50	Sauer, J.	67	Schön, D.	102
research(design artefact driven)	143	restaurant	465	rough draft(resolution)	208	saw off	350	school	276
research(design based)	140	restoration	70	round building(snake bite its own tail)	116	SBR	272, 332	schools	268
research(design document based)	144	restrictions and potentials	389	round buildings	115	SBR 258	272, 273, 276	schools of thought(design method)	339
research(design driven)	95, 137, 138, 485	restrictions time	308	round urban villas	115	Scala	113	schouwburg	482
research(design knowledge)	99	restrictions(location, social, material)	443	route	441	scale	55, 73, 79, 367	Schramm, U.	152
research(design orientated)	146	restructuring(areas)	433	routine	357, 362, 387, 389	scale changing design	90	Schröder House	91, 108
research(design process driven)	140	result based research	137	routine designing	363	scale levels	37, 421, 441	Schultz, U.	204
research(design project based)	141	result(focus)	311	routine(actions in the sequence)	416	scale model	275	Schutte-Postma, L.	79
research(design project based)(collective activities(context, programme, task))	141	results of design processes	143	routine(habituation(experience))	403	scale paradox	37	Schwartz, I.	380
research(design result driven)	143	results(incremental)	285	routine(knowledge & insight)	356	scale paradox(mathematical division)	205	science	97
research(design workshop based)	141	results(interim)	417	routine(recipe(master-and-apprentice))	416	scale relation study	288	science and technology(state)	307
research(design(outcomes))	143	results(varied)(workshop project)	141	routine(stereotypical programme(built-in))	415	scale relations	287	science of making	415
research(design)	99, 138, 151	results(variety)(research(design project based))	141	routines	415	scale sensitive	105	science(categories(alpha, beta, gamma), ICT)	379
research(designerly enquiry driven)	144	retailer inquiries	269	Rue Nungesser et Colli	393	scale switch	105	science(critical, contemplative)	307
research(designerly interpretation based)	145	retail-establishment(large scale)	269	Rue Saint-Guillaume	394	scale(falsification)	70	science(debate)	14
research(designerly workshop based)	142	retailstructure(concentration, hierarchy)	268	Ruegg, R.T.	167	scale(five point)	154	science(definition)	22
research(document based)	144	retardation(activity(project(graph theory)))	218	ruin	67	scale(frame, grain)	50	science(design)	145
research(empirical)	13, 138, 141, 145, 416	retrieval(configurations(manipulation))	238	rule giving	80, 276	scale(large)	73	science(model)	181
research(evaluating ex post)	149	retrieved	11	rule of law	81	scale(level)	267, 435	scientific	22
research(evaluating)	21	retrieving	381	rule of the game	474	scale(level, municipal)	84	scientific ambition	11
research(evaluation)	138, 160	revamping of ideas	395	rule of thumb	266	scale(level, separate building)	84	Scientific Council on Government Policy	494
research(ex ante)	159	review of literature	275	Rue Nungesser et Colli	393	scale(levels)	26, 84, 167	scientific criticism	329
research(ex post)	160	Reyndorp, A.	311, 436	Rue Saint-Guillaume	394	scale(map)	73	scientific design and study work	11
research(experimental design)	364	Reynolds(non-dimensional number)	329	Ruegg, R.T.	167	scale(measure)	348	scientific feat	330
research(experimental)	21	rhythm	109	ruin	67	scale(paradox)	206	scientific forum	249
research(explorative(workshop project))	141	rhythm and (inter)space	95	rule giving	80, 276	scale(sense)	291	scientific method	34, 298
research(explorative)	141, 143, 144	rhythm(history)	63	rule of law	81	scale(small)	73	scientific methods of research	95
research(explorative, questions(what, how, why))	138	ribbon city	182	rule of the game	474	scale(three point)	154	scientific methods(epistemological limits)	448
research(exploratory)	89	Richards, W.	243	rule of thumb	266	scale-less	106	scientific report	19
research(focus)	496	Ridder, H. de	339	rule of thumb	266	scales	274	scientific status(publishing)	329
research(futures(probable))	492	ridges(dunes)	132	rule of thumb	266	scaling techniques	155	scientific task	12
research(goal)	138	Riemsdijk, M.J. van	255, 417, 448	rule of thumb	266	Scandinavia	482	scientific thinking(foundation)	414
research(heuristic)	89	Rietveld, G.	91, 108	rule of thumb	266	scanning the future	252	scientific visualisation	246
research(hypothesis)	409	right of way	81	rule of thumb	266	scarce resources	293	scientific work	19
research(individual design based)	140, 143	Rijks Planologische Dienst	162	rule of thumb	266	scenario(model(explorative, potential, projective))	184	scientific(new possibilities)	13
research(listing)	21	Rijksinstituut voor Volksgezondheid en Milieu	251	rule of thumb	266	scenario(normative)	259	scientifically verified concept	285
research(market)	283	Rijnland(Water Board)	423	rule of thumb	266	scenario(perspective)	258	score(performance)	167
research(methods)	95	ring structure(access)	326	rule of thumb	266	scenario(policy(critical, dynamic, careful, relaxed)(water system, agriculture, international connections, multicentred network systems))	494	scores(separate)	166
research(operational)	409	ripple effect	350, 353	rule of thumb	266	scenario(prognosis)	258	scores(total, separate)	166
research(pre-design)	151	rising(floors)	325	rule of thumb	266	scenario(projective)	259	scorings(compiled)	163
research(prescriptive)	53	risk factor	327	rule of thumb	266	scenario(reference, trend)	162	SCP	259
research(programming (focus))	266	risk(consumer)	212	rule of thumb	266	scenario(secto)	259	SCPB	497
research(programming(rough, detailed)(planning process(stage)))	267	risk(producer)	212	rule of thumb	266	scenario(surprise)	259	screen(frame, grain)	211
research(programming(supply side(income growth(population growth), synergy(amenities), financial feasibility, location, deterioration, vandalism, criminality)))	267	risky design decision	338	rule of thumb	266	scenario(trend(model(predictive, projective(probable)))	184	script(computer programming)	234
research(programming)	21	risky elements(awareness)	168	rule of thumb	266	scenario(trend)	185, 259	sculpturing(model)	421
research(result based)	137	risky(proposition)	24	rule of thumb	266	scenarios	255, 258	SD	338
research(tools)	21	Risselada, M.	57, 92, 144, 152	rule of thumb	266	scenarios(bandwidth)	162	search	100, 140, 492
research(type)	138	Rittel, H.	433	rule of thumb	266	scenarios(contrast)	259	search areas	374
researchable system	254	ritual	474	rule of thumb	266	scenarios(CPB)	259	search as you draw	408
researcher	400	river landscape	134	rule of thumb	266	scenarios(cultural)	259	search routines	238
researcher(empirical)	447	river(city)	134	rule of thumb	266	scenarios(designs(alternative))	185	search(patterns)	382
researchers(architectural)	98	RIVM	259, 497	rule of thumb	266	scenarios(driving forces)	162	search(relevance)	238
resemblance	245, 401	road	429	rule of thumb	266	scenarios(economical)	259	searcher's own graphic input(retrieving designs)	238
resemblance(enhance)	246	road safety	316	rule of thumb	266	scenarios(evaluation)	161	searches	455
reserve	325	road(curved)	423	rule of thumb	266	scenarios(extreme)	162, 259	second line investigators	327
residence(traditionally built)	352	road(motor)	424	rule of thumb	266	scenarios(main themes(national(spatial structure)))	162	sectionalisation	307
residences(drum)	115	road(provincial feeder)	391	rule of thumb	266	scenarios(nature)	259	sector scenario	259
resident satisfaction	163	road(stretch)	218	rule of thumb	266	scenarios(policy)	259	sector trends	259
residential areas	437	robust(design(scenarios))	162	rule of thumb	266	scenarios(reference, trend)	162	sector(sub-group))	351
residential blocks	316	robustness	20, 26, 51, 93, 255, 367, 368	rule of thumb	266	scenarios(uncertainty)	266	security standards	274
residential building	349, 357	robustness(unpredictable developments)	162	rule of thumb	266	scenarios(varying(driving forces))	162	security(built-in)	356
residential consumer's test	165	Rochester	169	rule of thumb	266	scene	243	security(fire)	324
residential market(supply, demand)	354	Roethlisberger, F.J.	414	rule of thumb	266	scene(architectural)	243	seduction model	184
residential neighbourhood	433	rôles	297	rule of thumb	266	scene(recognition)	243	see different things	399
residential structure	419	rôles(persons deciding, agents in initialing, citizens in defining and selecting perspectives)	497	rule of thumb	266	Scha, R.	241, 245	see things differently	399
residential structure resolution	173, 208	Röling, L.C.	455, 465	rule of thumb	266	Schaaf, P. van der	149, 151, 159, 161	seeking(finding)	411
resolution	211	Roman priests(ritual)	474	rule of thumb	266	Schade	81	segmentation	243
resolution(drawing)	211	Romans	96, 474	rule of thumb	266	Schalkoort, T.A.J.	327, 335, 337, 338	segmentation(morphological reconstruction)	445
resolution(frame, grain)	211	Ronchamp chapel	401	rule of thumb	266	Scheepvaarhuis	120	segments	115, 290
resolution(vector calculation)	211	Ronden, J. den	54	rule of thumb	266	schema	103	segregation	105
resolution(vector drawing computer programme)	210	Rongen, C.T.H. van	323	rule of thumb	266	schema(frame, grain)	211	segregation(function)	106
resolutions	208	roof	341, 347	rule of thumb	266	schema(verbal model)	186	segregation <sub>100m</sub> (function)	105
resolving capacity(frame, grain)	211	roof construction	342	rule of thumb	266	schema(wishes, ideas)	462	segregation <sub>20m</sub> (function)	105
resources(efficient use)	167	roof shapes	342	rule of thumb	266	Schepvaarhuis	120	segregation <sub>5m</sub> (function)	106
		roof(cantilevering)	407	rule of thumb	266	Schiffman	102	Sekisui Heim house	281
		roof(laying)	354	rule of thumb	266	Schiller	298	selection	97
		roof(parabolic)	115	rule of thumb	266	Schiller-Brager	334	selection criteria	341
		roof(seemingly wafer-thin)	407	rule of thumb	266	Schliemann	401	selection matrix	341
		roof(shape)	342	rule of thumb	266	Schmitt	378	selection(comparison)	484
				rule of thumb	266	Schokker	79	selection(evaluation)	141
				rule of thumb	266	Scholarly designers	360	selection(jury)	141
				rule of thumb	266	Scholarly identity	369	selection(negative)	403
				rule of thumb	266	Schön	102		
				rule of thumb	266	School	276		
				rule of thumb	266	Schools	268		
				rule of thumb	266	Schools of thought(design method)	339		
				rule of thumb	266	Schouwburg	482		
				rule of thumb	266	Schramm	152		
				rule of thumb	266	Schröder House	91, 108		
				rule of thumb	266	Schultz	204		
				rule of thumb	266	Schutte-Postma	79		
				rule of thumb	266	Schwartz	380		
				rule of thumb	266	Science	97		
				rule of thumb	266	Science and technology(state)	307		
				rule of thumb	266	Science of making	415		
				rule of thumb	266	Science(categories(alpha, beta, gamma), ICT)	379		
				rule of thumb	266	Science(critical, contemplative)	307		
				rule of thumb	266	Science(debate)	14		
				rule of thumb	266	Science(definition)	22		
				rule of thumb	266	Science(design)	145		
				rule of thumb	266	Science(model)	181		
				rule of thumb	266	Scientific	22		
				rule of thumb	266	Scientific ambition	11		
				rule of thumb	266	Scientific Council on Government Policy	494		
				rule of thumb	266	Scientific criticism	329		
				rule of thumb	266	Scientific design and study work	11		
				rule of thumb	266	Scientific feat	330		
				rule of thumb	266	Scientific forum	249		
				rule of thumb	266	Scientific method	34, 298		
				rule of thumb	266	Scientific methods of research	95		
				rule of thumb	266	Scientific methods(epistemological limits)	448		
				rule of thumb	266	Scientific report	19		
				rule of thumb	266	Scientific status(publishing)	329		
				rule of thumb	266	Scientific task	12		
				rule of thumb	266	Scientific thinking(foundation)	414		
				rule of thumb	266	Scientific visualisation	246		
				rule of thumb	266	Scientific work	19		
				rule of thumb	266	Scientific(new possibilities)	13		
				rule of thumb	266	Scientifically verified concept	285		
				rule of thumb	266	Score(performance)	167		
				rule of thumb	266	Scores(separate)	166		
				rule of thumb	266	Scores(total, separate)	166		
				rule of thumb	266	Scorings(compiled)	163		
				rule of thumb	266	SCP	259		
				rule of thumb	266	SCPB	497		
				rule of thumb	266	Screen(frame, grain)	211		
				rule of thumb	266	Script(computer programming)	234		
				rule of thumb	266	Sculpturing(model)	421		
				rule of thumb	266	SD	338		
				rule of thumb	266	Search	100, 140, 492		
				rule of thumb	266	Search areas	374		
				rule of thumb	266	Search as you draw	408		
				rule of thumb	266	Search routines	238		
				rule of thumb	266	Search(patterns)	382		
				rule of thumb	266	Search(relevance)	238		
				rule of thumb	266	Searcher's own graphic input(retrieving designs)	238		
				rule of thumb	266	Searches	455		
				rule of thumb	266	Second line investigators	327		
				rule of thumb	266	Sectionalisation	307		
				rule of thumb	266	Sector scenario	259		
				rule of thumb	266	Sector trends	259		
				rule of thumb	266	Sector(sub-group))	351		
				rule of thumb	266	Security standards	274		
				rule of thumb	266	Security(built-in)	356		
				rule of thumb	266	Security(fire)	324		
				rule of thumb	266				



selective attention	25, 444	changes of directions, variation of	simulations	372	social relevance(history)	64	space(cut-out)	475	
selective mental aggregate	236	changes of direction))	215	Simulink	225	social security	276	space(Euclidian)	183
selective perception	53	shape(nonsensical)	243	simultaneity in the work	409	social-historical approach	60	space(horizontal)	475
self-directedness	362	shape(starlike)	494	simultaneous designing	361	socially relevant	59	space(infinite)	475
self-evident	413	shape(twisted)	487	simultaneously(true)	201	social-psychological mechanisms	59	space(intellectual)	190
self-evident actions	416	shapes(combining)	72	Sinck, Lucas Jszn.	121	society(knowledge based)	305	space(logical)	194
self-explanatory (visual)	408	shapes(language)	109	single-curved sideline	488	sociology	414	space(partial building groups)	349
self-learning techniques	378	shapes(list)	72	singular solutions	209	Soeder, H.	203, 204, 208	space(plane to volume)	477
self-reflexive statements	37	shapes(simple(triangle, square, circle))	215	site	89	Soest, J.P. van	181, 187	space(public)	368
self-regulation	80	shapes(states of dispersion)	209	site articulation	114, 439	soft computing methods	382	space(separating, enclosure, occupier)	351
self-similarity	225	shape-structure	114	site articulations	433	soft computing techniques	377	spaces(atomic elements(architectural composition))	234
semantic differential(dichotomies)	158	shaping	58	site boundaries	404	software for architectural design	377	spaces(closure)	56
semantic network(computer programming)	234	shaping decisions	60	site visits	275	software(spatial)	379	spaces(glass)	331
semantics	191	shaping(image, judgement)	308	site(articulating)	433	soil improvement	342	spaces(symbols)	233
semiotic vocabulary	487	shared entrance(into light(square))	467	site(assessed and formulated by the architect)	405	soil pollution	164	spaces(lime ordering)	474
Semper, G.	113	shared sub-contracting	360	site(bordering)	418	soil(history, design)	63	spacious central area	326
sensation value	104	sharing reception facilities	169	site(building)	341, 347, 350	soil(maximisation)	315	spaciousness	55
sense for scale	291	Sharp, J.	215	site(cultural history)	63	Sola-Morales, M. de	125	spaciousness(model)	431
sense of 'place'	95	shifts of attention	404	site(fill)	208	solar cells	316	span with a minimum of material	407
sense of space	392	ship-building	116	site(history)	63	solar collectors	171, 316	Spanjers	355
senses	414	shipbuilding yard	342	site(off)	280	solar energy	313, 316, 323, 326, 337	spanning	396
senses(pattern, process)	417	ships	67	site(on)	280	solid entities	244	spans(variety)	121
sensitivity analysis	251	shopping centre	266	site(reading)	444	solid(amorphous)	285	spatial analyses(without effects(implementation, use))	188
sensitivity(initial input)	257	shopping centre(turnover)	269	site(visit)	470	solids(regular)	216	spatial architectural choices	155
sensitivity-analyses(optimisation)	221	shopping centres	268	site(waterfront)	407	solipsism	413	spatial areas	347
sensory deprivation	413	shopping centres(attraction)	268	situation	89, 389	Solomon's judgement	205	spatial arrangement	107, 108, 109
sensory impressions(synchronous, various)	414	shopping centres(concentration)	268	situation at location(analysis of buildings)	118	solution alternatives	251	spatial articulation	242
sensory motor system	415	shopping centres(transport(public))	268	situations(future)	491	solution in principle	370	spatial characteristics	131
sensual(architecture)	421	shopping list	409	situation(idea)	389	solution space	246, 300, 302	spatial composition	128
sentence function	40	shopping space	266	situation(placebound(combinations))	492	solution space(optimisation)	221	spatial concept	185
sentence(full)	190	shopping(one stop)	268	situations(work)	389	solution(architectural)	107	spatial configuration	153
separate rooms	275	shops(combining(amenities))	268	size and proportion	95	solution(best)	295	spatial conflicts	237
separating	351	shortest path	218	size of an office unit	423	solution(designer(inquisitive nature, creative approach))	99	spatial consequences	433
separating components	345	shortest-path algorithm	218	size of the rooms	336	solution(flash)	470	spatial constraints	236
separating(outside, inside, soil, water)(horizontal, vertical, angle)	351	Siberia	117	size(alignment)	424	solution(least resistance)	162	spatial design	336, 338
separation	105	sick building syndrome	276, 327	size(legenda)	498	solution(plural)	402	spatial design(general lay out)	332
separation(function)	324	side aisles	123	size(positioning)	345	solution(problem)	251	spatial differentiation	438
separation <sub>1m</sub> (function)	105	sidelines(straight)	488	size(geometry)	216	solution(rash)	406	spatial drawings	462
separation <sub>2m</sub> (function)	105	Sierpinski(fractal)	226	sizing(of the module)	425	solution(variants(remodelling, expansion, disposing, joining, moving, new building design))	271	spatial effectiveness	419
separational node	218	Siers	370	sizing(positioning)	349	solutions	59, 294	spatial experiencing	367
separations	370	sieve analysis	73, 76	skeleton	237	solutions for the part-problems	350	spatial form	370
separations(connections)	368	signature(spatial)	115	sketch map	315	solutions(alternative)	251, 271	spatial functional organisation	434
sequence	27	significance → meaning	392	sketch plan	50	solutions(compromise, synthesis, decision making(autocratic))	303	spatial idea	408
sequence of actions	410, 415	significance(transcendental)	64	sketch(chalk)	429	solutions(creative(method))	340	spatial ideas(computer)	380
sequence of images	246, 441	significance(variable)	190	sketch(exploration)	429	solutions(different)	60	spatial implications	56
sequence(autonomous)	115	significant	159, 475	sketch(first little(office unit(size)))	423	solutions(direction)	90	spatial inter-action models	269
sequence(Fibonacci's)	213	significant to others	56	sketch(loose)	289	solutions(diversity)	20, 484	spatial inter-dependence	440
sequences	417	signification(change(imagination))	402	sketch(spatial)	287	solutions(finding)	300	spatial interface	84
sequences of kindred building	276	signification(context)	400	sketch(studying)	424	solutions(innovative)	459	spatial model	182
sequencing	128	signification(layers)	402	sketch(superimposed on the maps)	429	solutions(novel)	95	spatial models	145, 181
sequencing(difference of place)	205	significations(system)	393, 399, 400	sketchbooks	408	solutions(optimum selection(subsolutions))	302	spatial need	273
sequential	377, 447	signs	476	sketched design	459, 465	solutions(part)	340	spatial ordering	433
sequential computer command	197	signs(naming)	474	sketched designs	309	solutions(partial)	60	spatial organisation	133
sequential identification	205	signs(reading, interpreting)	475	sketches	287, 291, 423	solutions(singular)	209	spatial organisation of activity(building)	271
sequentiality(differences, changes)	447	similarities and continuities	413	sketches(holiday)	461	SOM Group	313	spatial orientation	274
serendipity	24, 371	similarities(history)	401	sketching paper	411	somatic reality	478	spatial outline plan	340
series of actions	416, 417	similarities(typological)	90	sketching paper on a role	429	sound-absorbent properties	286	spatial plan	340
series(arithmetical)	212	similarities(typological)	90	sketching(report)	291	source material(analysis)	138	spatial planning	436
Serra, R.	110, 111	similes	245	skin(dry)	327	source(history, bibliographic ordering)	62	spatial planning regulation	435
serviceability tools and methods	155	Simon, H.	294	skin(maintenance)	327	source(history, chronological ordering)	62	spatial policy	270
services	347	Simonis, J.B.D.	159	skin(U-shaped)	326	sources	96	spatial proximity	275
servo-mechanism	309	sky-line(Chinese)	421	Skinner	414	sources of law	81	spatial relations	87, 275, 287
set	205	slab	114	slab	407	sources(analysis of buildings)	118	spatial signature	115
set of actions(not model)	186	slab(slender)	407	slab	224	sources(history, monographic ordering)	62	spatial sketch	287, 289
set theory	192	slack	224	slate panels	394	source(history, ordering)	62	spatial software	379
set(equality(nature), difference(place))(scale(paradox), abstraction(change))	206	slave of the tools	381	slave of the tools	381	source(history, topographical ordering)	62	spatial structure	127, 162
set-dressing workshop	465, 466	Slicher van Bath, B.H.	258	Slicher van Bath, B.H.	292	source(history, typological ordering)	62	spatial structures	355
setting	394	sloping trajectory	292	Sloterplas	130	sources	96	spatial structuring	345, 441
SEV	313	slots	237	slots	237	sources of law	81	spatial temporal completeness	189
sewage pipes	336	small business areas	209	small business areas	209	sources(analysis of buildings)	118	spatial translation of the programme	438
sewage treatment	313	Small centres	269	Small centres	269	sources(history)	61	spatial units(programme)	434
SfB classification system	347	small-town environment	470	small-town environment	470	sources(history, critique)	62	spatial-material fabric	473
shade and shelter(tree)	399	Smienk, G.	457	Smienk, G.	457	sources(history, secondary)	62	spatial-psychological requirements	275
shading	336	Smith, P.F.	95	Smith, P.F.	95	sources(knowledge)	43	spatio functional typology	155
shading installations	328	SMO	359	SMO	359	sources(primary)	61	speaker(performer(design incident))	421
shape	330, 341	smooth(line)	215	smooth(line)	215	sources(reflective, history)	66	speakers-heatre	480
→ form		Smulders, F.E.H.M.	373	Smulders, F.E.H.M.	373	sources(use)	61	special building component	282
shape grammar(Palladian)	237	snake's skin	464	snake's skin	464	Spaarne	134	special element(urban arrangement)	130
shape grammars	244	snugness(designers)	421	snugness(designers)	421	space	441	specialism	104
shape of the building	335	so(logic)	194	so(logic)	194	space and place	403	specialist	281
shape of the		soberness	273	soberness	273	space for conditioning	11	specialists	109, 293
building(maintenance(accessibility(access-equipment)))	337	social climate	269	social climate	269	space frame(triangulated)	364	species(fitting conditions(applying task))	405
shape roof	342	social conditions	309	social conditions	309	space groups	242	species(new)	256
shape(archetypal)	110	social control	56	social control	56	space in our imagination	194	specification	370, 418
shape(attenuating)	110	social debate	307	social debate	307	space mass	129	→ programme of requirement, brief, task	
shape(building)	327	social development	311	social development	311	space of the templum(defined and ordered(gestures))	475	specification(building)	109
shape(folding)	110	social differentiation	104, 105	social differentiation	104, 105	space reservation(building, group, subgroup, sector)(adaptability(part, form, material))	352	specifications(construction(scale))	279
shape(geometrical)	487	social equity	494	social equity	494	space(action)	165	specifications(project)	282
shape(giving)	58	social group optimisation	293	social group optimisation	293	space(actor's)	481	specified performance	283
shape(minimal number(directions), changes of directions, variation of changes of direction))	215	simulation programmes	335	simulation programmes	335	space(build in(installations))	337	Speed regulation systems	127
		simulation(design analysis)	246	simulation(design analysis)	246				
		simulation(light)	246	simulation(light)	246				
		simulation(variables(relation))	447	simulation(variables(relation))	447				



Spekking	276	station(train)	269	structure type	104, 106	study proposal(risk-free citations)	30	sub-terranean	467
Spekkink, D.	276	statistical analyses(subjective data)	329	structure(aim)	92	study proposal(scale falsification)	29	subtract(form)	104
spheres(halved)	289	statistical analysis	54	structure(analysis of buildings)	117	study proposal(self-evident aspects)	30	subtracting	206
Sphinx – Céramique	439	statistical arithmetic methods	207	structure(crystalline)	285	study proposal(study programmes)	30	subway train(entering)	392
spine	11	statistical data	335	structure(designing)	216	study proposal(sub-projects)	30	success and failure	60
Spinoza	447	statistical distribution of properties	328	structure(double)	132	study proposal(synergy)	30	success or failure(indicators)	158
spiral	115	statistical surveys	53	structure(elements)	436	study proposal(theme)	29	successor(activity(project(graph theory)))	218
spiralling(verticality)	482	statistically representative	199	structure(fixed)	300	study proposal(title(significant))	29	suffering objects	446
spirally elevation	116	statistics	209, 267	structure(form(form))	93	study proposal(university latitude)	28	sufficient condition	196
spirit of the concept	309	Statistics Netherlands	258	structure(form)	92, 93	study proposal(website)	30	suggestive(language(designer))	190
spiritual existence	491	statistics(history)	62	structure(form, function)	441	study(application)	330	suitable building	470
spiritual ordering	474	statistics(possible events)	210	structure(function)	92	study(application-related)	329	sum(outcomes)	220
split-level accumulation	464	statute	81	structure(hierarchical)	371	study(applied)	19	sum(squared)	220
spontaneous theatre	477	Steadman, J.P.	240	structure(layered)	68, 130, 131	study(casebased)	144	summarisation(levels)	382
spread	54	steel angle brackets	279	structure(main)	433	study(categorising)	71	summary	43
spreading	73	steel beams and columns	390	structure(organisational)	218	study(comparative)	143, 165	summation rule	219
spreading of opening hours	335	steel column	394	structure(preceding structure)	120	study(cycle(build, test, reformulate))	170	summer and winter conditions	334
spreadsheet(database)	205	steel diagonals	464	structure(reduction(drawing shamelessly))	459	study(design)	330, 436	Summerson, J.	234
SPSS	54	steel structure	394	structure(spatial)	127, 162	study(designerly)	142	summing	225
Spui	355	Steenbergen	445	structure(super)	488	study(double-blind)	328	sun	115, 316
Spuybroek, L.	364, 379, 380	steering function	225	structure(whole, parts)	441	study(experimental)	481	sun(course)	475
square	170, 429, 475	Steffen, C.	155	structuring devices	96, 101	study(explorative)	138	Sun, C-T.	382
square and its diagonals	121	Stein, H.F.	401	struyck(spatial)	345	study(forecasting)	253	sunblinds	331
square(double)	120	Stella	225	Struyck	291	study(form of the building (context(urban architecture)))	424	sunlighting studies	183
square(perception)	241	Stellingwerff, M.	142	Struycken, P.	416	study(form)	483	sunlighting(experiment)	183
square(shape(simple))	215	stempelen	188	Stuart Mill	414	study(fundamental)	19, 356	sunlighting-experiment	183
square(super, double)	123	stempel-verkavelingen	439	stubbornness	303	study(goal orientated)	173	sunshade & daylight regulation	365
squared sum	220	step(first)	473	studies(commisioned)	329	study(generating knowledge and insight)	456	sun-shades	347, 427
squares(public)	430	stereotype	103	studies(form)	142	study(historical)	71	sunshades(outside, adjustable)	331
SR	80	sterile architecture	286	studies(legal, history)	62	study(iconographic)	67	sunshading(type)	332
St. Denis stadium	395	Stevens, S.S.	207, 447	studies(media)	142	study(imagining)	142	super square	123
St. Gobain	355	Stevin	127	studies(problem solving)	328	study(intervention)	328	superfluous	459
Staal	128	Stichting Analyse van Gebouwen	117	studios(larger)	369	study(Jong, Voordt)	98	superimposition(patterns)	236
Staatsblad	80	Stichting Architecten Research	349	studios(small)	359	study(learning situation, practice)	338	superstructure	347, 488
Staatscourant	80	Stichting Bouwresearch Rotterdam	81, 272, 332	study	19	study(means orientated)	173	supervisor(ICT)	377
stability provisions	341, 342	Stigt, A.J. van	324	→ survey, research, inquiry, survey, investigation		study(means-orientated)	27	supply side	355
stability(perception)	241	Stijl, De	89, 103	study by design	12, 20, 21, 90, 173, 255, 436, 443, 496	study(monographic(analysis of buildings))	118	supply structure	268
STABU	347	stimuli(external)	413	436, 443, 496		study(morphological)	76	supply (building)	152
Stadt ohne Höfe	114	stimuli(triggering)	415	study by design(delay in time(changing(requirements, boundary conditions)))	455	study(normative)	25	support and infill	347
Slaets, Hendrick Jzn.	121	stimulus(blocking)	415	study(changing(requirements, boundary conditions))	455	study(ordering)	466	support points	341, 342
stage → phase		Stiny, G.	235, 237, 240	study by design(morphological reconstruction)	445	study(partial)	356	support structures	339
stage of exhaustion	369	stock exchange(Amsterdam)	119	study by design(typological research, design study)	453	study(pilot)	142	supports of the space	277
stage(abstracting)	128	stone	462	study for the designing	21	study(possible relations(idea))	328	Supreme Court	82
stage(deductive)	128	Stonehenge	474	study in depth	54	study(practical judicial)	80	sure(reasoning)	197
stage(growing)	369	storage	465	study in width	54	study(preliminary)	166	surface and access	114
stage(informative)	128	stories(matrix)	476	study model	184	study(proposal)	54	surface articulation	188
stage(penetration)	369	storyboard	247	study of the front	289	study(qualitative)	54	surface drainage	315
stage(pioneering)	369	Stouffs, R.	377, 380, 381, 382	study projects	11	study(questions)	420	surface energy	285
stage(saturation)	369	straight avenue	423	study proposal(ability to be criticised)	30	study(scholarly)	358	surface modification techniques	285
staged models	370	straight corners	204	study proposal(ability to be refuted)	30	study(scientific judicial)	79	surface(available)	210
stages of the design process(learning context, practice)	338	straight sidelines	488	study proposal(accountability)	29	study(technical)	356	surface(curve)	487
staging of the building process	373	strategic	254	study proposal(accumulating capacity)	29	study(time-frame(uncertainty))	159	surface(curved)	487
stair sizes(formula(Blondell))	239	strategic planning	498	study proposal(accumulation(knowledge))	30	study(variable object and context)	453	surface(glass)	490
staircase(central)	424	strategic planning(Deltametropolis)	499	study proposal(aim-orientated)	29	studying	12	surface(horizontal)	487
stairs	482, 489	strategic planning(design)	492, 493	study proposal(assignment initiator)	29	studying designer	360	surface(line to plane)	477
stairs system	325	strategic planning(objects, contexts)	493	study proposal(bold)	30	studying function of urban design	436	surface(lines(intervals(decreasing)))	206
stairs(positioning)	427	strategic projects	499	study proposal(book)	30	studying sketch	424	surface(measuring)	215
stamping	172, 188	strategic projects(choice(importance, urgency, opportunity to take action))	499	study proposal(cliché)	30	studyproposal(approach)	29	surface(minimal(calculation))	467
standard	83	strategy(combinations)	296	study proposal(concept formation)	29	studyproposal(question)	29	surface(ruled)	487
standard building products	282	strategy(national(space))	162	study proposal(concepts(overlap-ping))	29	STW	252, 258	surface(ruled, curve)	488
standard deviation	220	strategy(perspectives, projects)	496	study proposal(conditional(position))	29	style	96, 108, 300	surface(twisted)	487
standard elements	391	stream(graph theory)	218	study proposal(conference)	30	style of the 'thirties	291	surface(unfoldable)	487
standard office module	424	street	468	study proposal(converge)	30	style(history)	67	surface(vertical)	487
standard preferences	165	streets(cover)	325	study proposal(daring)	30	style-critical interpretation	66	surfaces(curved)	364
standard product	283, 355	streets(narrow)	377	study proposal(designing(affinity))	28	styles(working)	97	surfaces(empty)	420
standard solution(history)	66	strength	285	study proposal(drawing code)	29	stylistic framework	96	surfaces(ruled)	488
Standard Specification for Housing and Industrial Buildings	347	stressed(pre)	285	study proposal(empirically orientated)	29	stylistic rules	96	surprise scenario	259
standard(international)	360	stretch of road	218	study proposal(end product)	30	sub solutions(integration)	58	surrealistic mind	482
standardisation	171, 234, 348	stretcher	120	study proposal(expressed(image))	29	sub-contracting(shared)	360	survey	19
Standardisation(International Organisation)	348	striking details	446	study proposal(expressed(verbally))	30	sub-contractor / producer	282	→ research, inquiry, survey, investigation, study	
standardised production	380	strip or court centres	269	study proposal(facilities)	29	sub-contractors	271, 354	surveyable area	406
standardising	128	strips(brick)	111	study proposal(fascination)	29	subject	413	surveying(geometrical)	477
standards	331	strong and the weak points	369	study proposal(featuring)	29	subject(active)	48	surveys(statistical)	53
stapling	116	structural and compositional variation	141	study proposal(featuring)	29	subject(grammar)	225	sustainability	276, 427, 439
starlike shape	494	structural aspects(history)	63	study proposal(featuring)	29	subjective	419	sustainability doctrine	427
star-shaped structure	481	structural design	434	study proposal(featuring)	29	subjective data(questionnaires)	329	sustainability value	104
starting point for a research activity	485	structural information theory	242, 244	study proposal(featuring)	29	subjectively rational	294	sustainability(environmental)	494
starting point(exogenous)	418	structural information(perception)	242	study proposal(featuring)	29	subjectivity	25	sustainability(material, method, energy(sources))	423
starting point(morphological)	418	structural layout	424	study proposal(featuring)	29	sub-paragraphs	46	sustainable balance	494
starting points(design)	418	structural scheme	279	study proposal(featuring)	29	sub-problems	58	Sustainable Building projects	313
starting position of the rule	487	structuralism	94, 414	study proposal(featuring)	29	subsets(inter-dependent)	440	Swanborn, P.G.	54, 155, 249
state of affairs	201	structure	20, 92, 94, 104, 109, 346, 370, 441, 445, 463	study proposal(featuring)	29	sub-solutions	295	swimming pool	342
state of dispersion(possible)	208	structure in lines (         )	326	study proposal(featuring)	29	substructure	347	Swiss Re	364
state(current)	372	structure of a system	370	study proposal(featuring)	29	subsystem(connection)	281	switching	58
statement(increasingly clear(agents))	308	structure of functions(analysis of buildings)	118	study proposal(featuring)	29	sub-system(internal partitions)	280	syllogism	191, 194
statements(disproportion)	309	structure of materials(analysis of buildings)	118	study proposal(featuring)	29	sub-systems	279	syllogism(incomplete)	200
statements(reliable)	328	structure of space(analysis of buildings)	118	study proposal(featuring)	29	sub-systems(intentional considerations, cultural pre-suppositions(different per individual))	181	symbol and ornamentation	95
state-of-the-art(increasing)	357	structure plan	434, 435	study proposal(featuring)	29			symbolic	68
states of dispersion(non-contingent, discontinuous))	215							symbolic label	233
states of dispersion(shapes)	209							symbolic presentation	233
static design methods	330							symbolic structure	245
station(Amsterdam Central)	118							symbolical drawings	308
station(fuelling)	268, 269							symbolisation(conventional)	245
								symbolism	68

symbols(legend)	182	teaching(project definition, design(spatial, preliminary, final), supposed advisors)	338	Tête de Taureau	393	time(volume to movement)	477	transformed	40
symmetric profile	446	team design	295	tetrahedron	217	time-frame(uncertainty)	159	transformed(links)	390
symmetric tripartite configuration	242	team design	293	Tettero, W.	53, 152	time-pressure	357	transforming	487
symmetry	108, 240	teams(multi-disciplinary)	339	text and images(potential to be judged)	52	Tinbergen, N.	404, 414, 415	transforming(area)	419
symmetry and asymmetry	95	teamwork	380	texture and colour (front)	289	tinted glazing	431	transition(meaning)	393
symmetry(bi-lateral)	244	teapot	449	the case(truth)	190	tissue	347	translating the notions	441
symmetry(perception)	240, 241	technè	479	theaters	112, 113	title page	43	translation (images, sketched designs)	272
symmetry(translational)	244	technè(creation(concrete, physical))	478	Théâtre Spontanée	112, 465	title(commission)	474	transparent roof(closed wall)	285
symptoms of deficits(housing)	167	technical brief	281	theatre(amphi)	480	TL	336	transparencies	49
syn-aesthetic	414	technical composition(specifications)	281	theatre(classical)	470	TO	334	transparency	109
synchronisation	415	technical conditions	254	theatre(hall)	470	Toby, J.	104	transparency(effects)	167
synchronously	455	technical context	91	theatre(multipurpose)	481	token	73	transparency(eye-level)	392
synectics	371	technical design & informatics	379	theatre(panorame)	480	Tol, A. van	342	transparency(architecture)	332
synectics procedure	371	technical designing	356, 360	theatre(projection)	480	tolerance	36, 352	transparent façade	284
synergy	161	technical development process	369	theatre(puppet)	480	tolerance convention	348	transparent glass façade	285
synergy(amenities)	267	technical engineer	358	theatre(speakers)	480	tolerance (drawing)	211	transparent layer	429
syntactic	406	technical installations	326, 327, 346	theatre(theatrical)	481	tolerance (larger size)	354	transport networks(legenda)	498
synthesis	25, 58, 95, 303	technical know-how(history)	64	theatrical(functional)	421	tolerance(morphological reconstruction)	445	transport system	499
synthesis phase	340	technical life-span	323	thematic clusters	485	tolerance(nominal size)	212	transport(energy)	495
synthesis(analysis)	355	technical look	394	thematic diploma projects	141	tollens(modus)	197	transport(high speed)	495
synthesis(integration)	421	technical norms	80, 165	thematic form of enquiry	485	toolbox	395	transport(means of(amenities))	268
synthesis(solution(sub system))	58	technical people(analysis of buildings)	118	thematic or typological clustering	485	toolbox(design)	124, 125	transport(public shopping centres))	268
synthetic judgement a priori	204	technical performance(specification)	279	theme	101, 103, 128	toolbox(designer's)	93	transport(public)	313
synthetic judgements	204	technical sciences	12	theme(binding(task, programme, imitations, constraints))	141	tools	415	transportation	330
system	103, 229, 370, 445	technical specialities	359	theme(binding)	141, 485	tools(proportional system)	124	transportation system	494
system behaviour	255	technical study	356	theme(charge)	476	Toorn Vrijthoff, W. van der	269	transportation system(metropolitan system)	500
system boundaries	103	technical study(diagnostic methods)	327	theme(templum)	480	Toorn, M.C. van den	189	transportation(public)	465
system output	229	technical study(social sciences(complaints))	327	themes	96, 101	top-down approach	104, 339	transversality principle	243
system products	282	Technical University of Eindhoven	336	themes(analysis of buildings)	118	topographical maps	71	travel time	496
system(architectural)	108	technical(potential for execution)	433	themes(compositional)	142	topographical(non)	74	travel time(reduction(Deltametro-polis))	499
system(building)	280	technician	478	themes(design)	483	topography	71, 418, 440	tree fractals	226
system(cohesion)	218	technicians(maintenance)	327	themes(evaluation)	149, 154	topological deformation	216	tree(perception)	399
system(dynamic)	225	technique	87, 415	themes(formal)	95	topology	209, 216, 361	trees(position)	466
system(exogenous variables)	229	technique(building)	109	themes(identifying)	99	tordo(high-rise)	488	trees(preserved)	468
system(input)	229	technique(building)((partitioning, load bearing, facilities)(function, materials, construction))	346	themes(particular)(research(design project based))	141	tordo(low-rise)	490	trees(cover)	325
system(lacking)	419	techniques(concatenated)	360	theoretical framework	60	torsion	357	trend	253
system(researchable)	254	techniques(unconventional)	427	theoretical model	329	Total Quality Assurance	365	trend prognose(model(predictive))	186
systematic	419	technology	433	theoretically interesting	59	TOTE cycle	58	trend scenario	184, 185
systematic approach	54	technology of communication	495	theory of functions	207	TOTE-model	455	trends	368
systematic comparison	142	technology screening	374	theory(empirical(rejection))	204	tourist eyes	432	trends in the environment	373
systematic design	436	technology(debate)	14	theory(known)	400	tower	121, 124, 464	trends(existing)	267
systematic methods	340	technology(empirical sciences)	307	theory(promotion(doctrine(design)))	140	tower(exhibition)	461	trends(sectors)	259
systematic way of working	291	technology(upgrade)	284	theory(value pattern)	438	towers	421	trend-scenario	259
systems	279, 491	teconics(history)	63	thermal climate	331	town hall	364	Trespa	355
systems analysis	58, 250, 254, 455	teleconferencing	380	thermal comfort	274	townscape	439, 441	triadic composition	237
systems approach	298	telescope	21	thermal insulation	331	Townscape	439	trial installation	329
systems modelling	254	tem(cutting out)	475	thermal properties	330	TQA	365	triangle	215
systems of measure	209	temenos	475	thesaurus	38	tradingsociety(Netherlands)	121	triangle(Egyptian)	119
SZW	338	temnein	475	thick theory of rationality	295	tradition	294	triangle(equilateral)	121
		temperature control	464	Thieme, J.C.	161	tradition(design)	369	triangle(shape(simple))	215
		temperature requirements	335	Thiersch, A.	118, 123	traditional	273	triangle(urban composition)	430
		template	475	Thijsse, E.	194	traditional habit	281	triangular building masses	170
		template(square, circle, cross, labyrinth)	476	thin theory of rationality	295, 296	traditional materials	281, 358	triangular figure	123
		templates(building elements(holes(dents, notches)))	236	things	200	traditional methods of building	251	triangulated space frame	364
		temple	474	think conceptionally	395	Træleborg Theatre	477	triangulation	215
		temple(Platonic)	68	think primarily in forms(architects)	389	traffic analysis	419	trias cultura	104, 105
		templum	475, 479	think while we draw	408	traffic flow in the building	335	trias economica	104
		templum(defined and ordered(gestures))	475	thinker	479	traffic interchange	133	trias politica	104, 105
		tennis fields(noise requirements)	430	thinking(acting)	478	traffic load(graph theory)	218	trias urbanica	104
		tension(curve)	424	thinking(continent, Anglo-Saxon)	414	traffic machine	131	triggering stimuli	415
		tension(logic aesthetics)	97	thinking(doing)	96	traffic models	438	trigonometry	215
		tension(psychological(prison design))	170	thinking(looseness)	362	train station	269	trihedral environment	235
		tension(visual)	95	thinking(similarities and continuities)	413	trains of thought	361	Trinity	103
		tentative articulation	440	thirties(style)	291	Trancik, R.	126	trinity(holy)	479
		term(initial)	212	Thomsen, A.F.	149, 163, 167	transcontinental magnetic train	495	tripartite unity(creating)	479
		terminations (corners etc.)	120	thoroughfare	134	transfer	106	tri-partition	427
		terminology	12, 35	thought experiment	101, 183	transferable	12	Triles, D.K.	169
		Terpstra	154	thought models	183	transference(types)	106	Tromba, A.	209
		terrace-like collapsible drawers	395	thought process	389	transform	477	Trotz, A.J.	346
		territory	474	thought(looking)	421	transformation	35, 58, 106, 114, 390, 393, 394, 464, 496	Troy	401
		test development(coarse to fine)	166	thought(precision)	407	transformation of earlier experience	245	true	24, 249
		test enacted in the city	397	thought(schools(design method))	339	transformation(design)	134, 445	true is what works	415
		test setting programs	267	thought(trains)	361	transformation(designer's thinking process)	100	trust	294
		task(bounds)	406	three traces method	439	transformation(function of the product)	370	truth	189
		task(components of a building)	405	three-dimensional	475	transformation(great)	427	truth directed	26
		task(design)	483	three-dimensional models	231	transformation(influencing)	401	truth table	196
		task(fitting conditions)	405	three-traces method(function, composition, topography)	440	transformation(meaning)	394	truth(half(incompleteness))	189
		task(freeing)	406	three-way approach	313	transformation(perspective, scenario)	498	truth(half)	201
		task(pretext and catalyst)	397	thumbnails	49	transformation(repeated)	226	truth-value	195
		task(workshop project)	141	Thüsh, M.	182	transformation(two-dimensional pattern, spatial-programmatic architecture)	479	Tuan, Yi-Fu	404
		taste	414	tie plates and rivets	394	transformation(typological)	115	Tummers, L.J.M.	215
		taste(preferences and needs)	307	Tiemessen, N.T.M.	340	transformations	40, 104, 209, 216, 455	Tummers-Zuurmond, J.M.	215
		taxa	104	tiered structure(groups, sectors)	351	transformations in the legend	445	Tunçer, B.	377, 381
		taxonomy	103, 104	tiers	115	transformations of form	445	tuning of the lighting	468
		Taylor	275	Tietze, H.	62	transformations of structure	445	tuning the lighting	336
		TCP/IP	380	Tijen, van	212	transformations of the Netherlands	494	turnover(shopping centre)	269
		teachers(bad)	416	Tilburg	313, 314, 439	transformations(geometric)	234	Tversky, B.	235
				time and effect(uncertainty)	159	transformations(morphological reconstruction)	445	Twiske-West	115
				time cycles(scale range)	279	transformative assumptions	417	Twist & Build	357
				time frame	401	transformator	493	twist(angular)	430
				time saving	106			twisted building volumes	139
				time span(long term)	160			twisted shape	487
				time(restrictions)	308			twisted surfaces	487
								twister(vertical axis)	489

twisters	487	unravelling(themes(inter-related(composition)))	138	vague hypotheses and conclusions	421	Verheijen, A.P.J.M.	453, 459	volume to movement	477
twisting	487	unrestricted response	293	vague images	173	Verhoef, L.G.W.	323, 324	volume(building)	487
two-dimensional representations	231	unsatisfactory form	241	Vaihinger, H.	415	Verhulst, F.	257	volume(surfaces(intervals(de-creasing)))	206
type 20, 88, 103, 113, 395, 396, 439, 444		unscientific	419	valence(graph theory)	218	verifiability(empirical)	23	volumes(intersecting)	489
type characteristics	105	unspoken pre-suppositions	449	valence(nodes(graph theory))	216	verifiable	250, 274	Vondel	482
type of problem	437	untenable	249	valid	22	verifiable predictions	250	Vondelpark	188
type of production	346	upgrade the technology	284	valid(criteria)	371	verification	24	Voordt, D.J.M. van der	19, 33, 43, 53, 54, 98, 149, 151, 153, 154, 155, 161, 169, 249, 263, 271, 276, 277, 372, 453, 455
type structures	443	Uralski	117	valid(deduction)	198	Vernon, J.A.	413	Voort, R.Th. van der	435
type(concept)	116	urban adjustment	468	valid(logic)	197	Verrecchia, G.	417	vorm(funcitie)	94
type(door)	236	urban adjustment(building)	426	valid(reasoning)	198	Verschuren, P.	155	VR	378, 379, 382
type(form)	104, 106	urban architectural intervention	132	validation	310	vertical fitting(cross-section)	467	Vrieliink, D.	153, 155, 271, 276
type(function)	104	urban architectural intervention	132	validity	23, 155, 418	vertical forces	286	Vrijling, J.K.	152
type(history)	65	urban architecture	287, 424, 433, 461	validity'	92	vertical surfaces	487	VRML	232
type(ideal)	103	urban area	433	valuable in the existing situation	324	vertical(gravity)	243	VROM	186, 297, 311, 448, 496, 497, 499
type(object(liberalizing(context)))	493	urban centres(pattern)	496	valuation(objectified)	167	vertical(perception)	241	Vught, van	184
type(organic)	104	urban constellations	494	value free	23	vertices(graph theory)	216		
type(proto)	103	urban containers(buildings)	408	value(context)	400	victim(suspect)	192		
type(scale-free)	105	urban context	289, 427	value(initial)	228	video games	232		
type(stereo)	103	urban design	433, 436	values	101, 207, 389	Vienna	68		
type(structure)	104, 106	urban design(communicalive function)	436	values(changing(variable))	447	view(building)	324		
type(lacility pre-supposed)	255	urban design(studying function)	436	values(experience)	403	view(lines)	425		
type(theatre)	66	urban design(studying function)	436	values(nominal)	206	viewing apertures	170		
types	25, 96, 101, 485	urban differentiation	105	vandalism	158, 170	viewing-window	425		
types of buildings	436	urban diversity	499	vandalism(aminities)	267	viewpoint	250	Waal brick format	119
types of designers	357	urban fabric	474	Vanosmael, P.	416	vigour and wit	286	Waal format	123, 348
types(geometric)	104	urban fields(legenda)	498	variable	207	Villa Rotonda	104	Wagenaar, E.J.	329
types(models)	179	urban growth boundaries	499	variable loads	341, 342	Villa Stein	108	Wagner, H.	113, 300
typing	35, 288	urban image	434, 435, 441	variable significance	190	village(squares)	429	wailing-rooms	169
typological analysis	125, 133	urban image(experienced(sequence of images, place, content))	441	variable(following order)	204	villas(Palladian)	237	Waldenfels, B.	478
typological approach	439, 440, 442	urban image(functional planning(blotches plan))	434	variable(freedom of change)	189	VINEX	57	walks within the building	424
typological comparison(history)	66	urban inner court	135	variable(independent)	225	Vink, H.	435	wall finishes	274
typological considerations(history)	65	urban islands	129	variable(nature(equality), place(difference))	206	Viollet-le-Duc, E.	118, 119	wall lining	347
typological criticism	103	urban landscape	131, 468	variable(related differences)	189	virtual reality	382	wall(cohesion)	120
typological levels	113	urban office(Leiden)	423	variable(traditional delimitation)	448	virtual reality(future)	491	wall(hole)	285
Typological problems(history)	66	urban plan	460	variables	40, 53, 55	villas(partition)	332	walls(concealing)	392
typological research	12, 20, 21, 90	urban plan preserving the curve	423	variables(ability to move)	447	virtuoso	478	walls(partition)	332
typological similarities	90	urban plans	435	variables(decision)	301	vis-à-vis	114	Waltz, D.	235
typological transformation	115	urban programming	265	variables(design)	441	Vischer, J.C.	276, 334	warm bent twisted glass	490
typologies	96	Urban Renewal Act	84	variables(exogenous)	255, 260	visible(outside, inside)	477	washbasin	395
typology	21, 72, 90, 103, 112, 443	urban system	494	variables(possible future characteristics of objects)	447	vision	414	washing windows	337
typology of futures	492	urban task(commissioner)	435	variables(reduction(characteristic, value))	447	vision research	244	Wassenberg, F.A.G.	53, 57
typology(access)	114	urban villas	114	variables(relevant)	154	vision(design principle)	107	Wasserman(Café)	467
typology(built space)	439	urban villas(round)	287	variant(zero)	173, 253, 255	vision(design)	478	watching	477
typology(built)	429	urban(context)	288	variants	57, 324, 326	vision(enterprise)	373	Water Board Rijnland	423
typology(comparative analysis, evaluative study)	277	urbanisation(cultivation)	131	variants of solution	271	vision(overall)	406	water landscape	134
typology(design solutions)	151	urbanised landscape	134	variants(construction(weight carrying façade, skeleton structure))	169	visions(variety)	305	water level(ground)	315
typology(history)	66	urbanism	433	variants(interim)	418	visit(first(tourist eyes))	432	water networks(legenda)	498
typology(history, form)	62	urbanism(designing, planning, technology)	433	variation	102, 255, 485	visit(location)	466	water quality	315
typology(spatio functional)	155	urbanism(functionalist)	434	variation calculus	209	visit(site)	470	water system	494, 495, 499
typology(transformation(topology))	216	urbanism(functional-technical, )	433	variation(composition)	101	visiting hours	335	water(land)	129
Tzonis, A.	89, 103	urbanistic idea	405	variation(structural compositional)	141	visitors	470	water(maximisation)	315
		urge for survival	419	variations	103	visitors inquiries	269	water(positioning)	425
		urgency(public)	189	variations with repetition	208	visitors(category(amenities))	268	waterfront site	407
		usage concept	326	variations(combinatorics)	208, 209	Visscher, H.A.	75	waterfront(recreative quality)	134
		usage experiences	271	variations(local)	255	vistas(articulation)	430	water-management of the delta	496
		usage function	94	variations(possible)	339	visual arts	231, 470	waterrealm	495
		usage product enterprise	373	variety	485	visual attention	414	watersystems	493
		usage requirements	273	variety(architectural artefacts)	98	visual change(adding parts)	424	way of living	377
		usage(concept)	324	variety(opposition(average) ecology, organisational science, designing)	255	visual change(adding parts)	424	way of testing	456
		usage(continuation)	323	varying consistency	189	visual information	231	Web	377
		usage(possibilities)	26	vector	211	visual information(history)	62	Webber, M.	433
		usage(quality)	166	vector drawing computer programme	210	visual information(read)	96	Weber, M.	293
		use of materials	109	vector information	238	visual lines	466	Weber, R. L.	16
		use tools	415	vector of movement	487	visual perception	188	Weeber(mental elaboration of the conception)	417
		use(actual)	158	vector of movement	211	visual quality	273	Weeber, C.	98, 263, 287
		use(demands)	330	vector substruction	487	visual realism	246	Weeren, K. van	47
		use(efficiency)	166	vector(movement)	487	visual recognition	235	Weesep, J. van	24
		use(history, functional)	66	vectors	222	visual representations(computerisation)	231	Wegen, H.B.R. van	19, 90, 149, 151, 249, 263, 271, 276, 372
		use(period)	20	Veen, P. van der	378	visual tasks	336	weighing(effects)	446
		user(mythology)	479	Velsen	90, 465	visualisation	101, 102, 231	weighing(separate scores)	166
		users	151, 271	Velzen	465	visualisation(digital)	232	weight attribution in points	167
		users(interview)	466	Venemans, A.	374	visualisation(dynamic)	246	weight carrying façade	169
		users(leading)	374	ventilation(natural)	322	visualisation(photo-realistic)	245	weight(dead)	280
		users(observe)	466	Venturi, L.	70	visualisation(scientific)	246	weighting factors	166
		U-shaped(skin)	326	Venturi, R.	67	visualisations(interactive)	378	weighting factors(partial qualities)	154
		using	479	venustas	95	visualise part-solutions	341	weightings	341
		Utilisation function(history)	66	verb	40	visualising	411	weights	343
		utilisation value	104	verb(grammar)	225	visually pleasing	95	welded joints	394
		utilitas	66, 95	verba concepte	480	visuals(models, cartoons, simple pictures)	460	welfare conception	300
		utility	95	verbal	447	vital constraint	427	welfare effects	300
		utility buildings	335, 337	verbal criteria	370	Vitruvian trilogy	277	welfare theory	299
		utility values	104	verbal description(active subject)	413	Vitruvius	27, 63, 66, 91, 95, 108, 118, 152	welfare(collective)	300
		utility(maximisation)	296	verbal model	181	Vlam, A.W.	75	well being(emotional)	95
		UTM gridlines	473	verbal models	179, 181, 189	Vliet, J.M. van	167	Wells, D.G.	215
		Utopia(holistic)	421	verbal protocols	58	Vliet, K. van	439	well-to-do houses	395
		Utrecht	439	Verbeek, Th.	414	vocabularies	35	Wener, R.	169
		utterance(the case or not the case)	191	verbs	12	vocabulary	11, 35, 56	Werf, F. van der	56
		UV resistant glue	356	verbs of modality	189	vocabulary(controlled)	238	Wertheimer, M.	241
				Verdeau	129	vocabulary(form)	380	West 8	439
				Vereniging van Nederlandse Gemeenten	81	vocabulary(semiotic)	487	Westrik, J.A.	387, 433, 438, 439
						vogue	297	wetlands	495
						void	234	Wetzels, R.	159
						Vollers, K.	21, 139, 357, 454, 455, 487	what	53, 476, 479
								Whitehead, A.N.	190
								whole(parts)	429
								whole	476, 479

## W

wicked-problems	433	zones(border)	282
width(design)	141	zones(construction)	279
Wiebenga, J.G.	117	zones(montage)	114
Wijk, DE	315	zoning	275
Wijk, M.	276, 439	zoning constrictions	424
Wijk, S. van	234	zoning plans	81
Wijnbelt, D.	159	Zonnestraat	67, 115
wild housing	219	zoomorphic	67
Wilms Floet, W.	275	Zuid-as	435, 439
wind problems	313	Zundert, J.W. van	83
wind turbine	171	Zwarts, M.E.	346
window frame(timber)	281	Zweers, B.H.H.	275
window(lightning, viewing)	425	Zweers, T.	328
windows	280, 328	Zwitserleven Headquarters	356
windows(cleaning)	337		
Windows-icon(resolution)	208		
wings	170		
Winston, PH.	235		
wish(language)	194		
wishes honoured	470		
wishes(context(urban architecture), commissioner(interview))	459		
Witte Theater	465		
Wittgenstein(early)	447		
Wittgenstein(later)	447		
Wittgenstein, L.	38, 189, 190, 196, 200, 414, 447		
Wittkower, R.	69, 95, 237		
Wolkenkrabber	128		
Wolvega	429		
Woning Waardering Stelsel	163		
Woolridge M.J.	382		
woonkeur	311		
Woord, J. van der	346		
work back	143		
work of architecture	69		
work(plastic)	108		
work(process)	417		
workers per m <sup>2</sup>	270		
working	96, 225		
working conditions	414		
working environment(experimental, simu- lated)	142		
working hours	495		
working method	143, 427		
working methodologically	432		
working methods	97		
working model	469		
working styles	97		
working(analytical, synthetic)	311		
working(direction(subject, object))	192		
working(methodologically)	427		
workshop	141		
workshop project(initiators)	141		
workshop project(results(varied))	141		
workshops	249, 275		
work-surface	336		
world models	181		
world(facts(connections), not things)	200		
worlds(disparate)	394		
Worthington, J.	275, 276		
Woud, A. van der	118		
Wright(mental elaboration of the concep- tion)	417		
WRR	492		
WWS	163		
WWS(variants)	166		

## X

XML	380
XML-structured data	380
XOR	197

## Y

yard(shipbuilding)	342
young designers	363
youth	419
Ypenburg	435

## Z

Zaera, A.	108
Zaera-Polo, A.	383
Zappi	283
Zappi(objectives, mentality)	284
Zeewolde	90
Zeisel, J.	19, 24, 96, 155
zero	207
zero variant	173, 253, 255
zero-defect product	365
zone planning	273
zones of rupture	132